Brazil at the Louisiana Purchase Exposition

St. Louis, 1904

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BRAZILIAN PAVILION

NOTICE.

THIS PUBLICATION, intended to be more of a souvenir of Brazil's participation at the International Exposition of 1904, held in St. Louis, commemorating the purchase of the Louisiana Territory, than as a comprehensive description of the resources of Brazil, will, nevertheless, prove to be of some value as a starting point for future investigation.

The visitor, examining the products exhibited in the different departments, might be desirous of possessing a knowledge of the progress and natural resources of the country from which these products, which have been of special interest to him, have come.

As a usual thing, the very short time he has to make inquiries, and the want of knowing the easiest way of procuring the desired information, lead him generally to give up any idea he might have had in mind of becoming better acquainted with products and business methods of other countries, and to follow those with which he is more familiar and which do not present such difficulties. From a commercial point of view this is a great drawback, to a certain extent, for both the visitor and the exhibitor, because an opportunity is lost which otherwise might have proven to be the beginning of mutually profitable commercial business relations.

Representatives of large industries, through the medium of International Expositions, study the means of improving the productions of their factories, either by the use of better raw material, securing it cheaper by importing it direct from the producing centres, or by the improvement of their processes by using modern machinery. These gentlemen will also experience the same difficulty, if they can not find a source of information from which they can conveniently obtain reliable data upon which to judge and decide.

This book will guide through Brazil those interested in that country. After reading the first part, one will get a general idea of the nature of the country, as seen under different aspects, its resources, productive power and stage of progress. The catalogue following the first part contains a general list of all the exhibitors whose products have been shown at the Exposition, and with whom a direct correspondence may be carried on, in order to gain certain special knowledge or information on any of the subjects mentioned.

During the Exposition period any details or information concerning Brazil may be obtained direct at the Brazilian Building, World's Fair Grounds, or by letter to the President of the Commission.

COL. F. M. DE SOUZA AGUIAR.

St. Louis, September 7, 1904.

HONORABLE F. DE P. RODRIGUES ALVES
President of the United States of Brazil

HONORABLE LAURO MÜLLER
Secretary of Public Works

BRAZIL

BRAZIL is situated between 5° 10′ N. and 33° 45′ S.; and 8° 19′ 25″ E. and 30° 58′ 26″ W. of Rio de Janeiro, the islands of Fernando Noronha and Trinidade, which are in the Atlantic Ocean and belong to the Republic, not being included within these limits.

It is bounded on the southeast and northeast by the Atlantic Ocean; on the north by the French, Dutch and English Guianas and the Republic of Venezuela; on the northwest, west and southwest by the Republics of Columbia, Peru, Bolivia, Paraguay and Argentine, and on the south by the Republic of Uruguay.

Palm Tree Allée—Botanical Garden, Rio de Janeiro.

In area, Brazil ranks third of the countries of the world; Russia being the largest and the United States next. China, excepting Manchuria, is smaller than Brazil, but the comparison with Russia is entirely favorable to Brazil because the Brazilian lands are uniformly fertile and mild, while great stretches of desert tracts of land and frozen regions form more than one-third of the Moscovite Empire. The area of the United States even is only greater than that of Brazil when we take into consideration the territory of Alaska, separated from the States and forming a region apart.

Brazil, large as it is, is homogeneous in character, forming, we may say, a compact territory, half of which is bounded by the Atlantic Ocean, to which it has free communication by navigable rivers, the other half bordering on all the South American Republics except Equador and Chili.

Brazil occupies almost half of the South American continent, covering an area of 3,218,130 square miles; it is larger than Europe, one fifth-the size of America, and one fifteenth of the entire world.

The greater part of the country consists of an immense plateau from 1000 to 4000 feet above sea level, bounded on the north and south by the vast depressions formed by the basins of the great rivers, the Amazon and Paraguay.

Notwithstanding the fact that Brazil is commonly represented as mountainous, the country is really a long plateau interspersed by numerous valleys and rivers.

There are two large mountain chains: First the Coast Range following the Atlantic sea coast, then an interior range of mountains which join the first at the northern and southern boundaries of the Republic. There is also a strip of low land several miles wide, situated between the sea and the Coast Range Mountains.

City Hall, Bahia.

Monument Second of July, Bahia.

The coast of Brazil is washed by the Atlantic Ocean only. The waters of the entire country empty into this ocean. Considered with reference to its water system, the country presents three large hydrographic sections: the Amazon, the Atlantic and the Paraguay-Uruguay.

The Amazon, or Sea River, is the largest fluvial basin, not only of America, but of the whole world. Authors differ in their calculation as to the area of its surface. It has been estimated at 1,546,000 square miles, but Elisee Reclus calculates that it covers 2,160,000 square miles, while Maury puts it down at 2,048,480 square miles, and finally Dr. Alois Bludau gives it 2,722,000 miles.

In the opinion of the last writer, the basin of the Amazon itself covers a superficies, the total of which is nearly equal to the basins of the Mississippi, La Plata and the Orinoco combined.

The Amazon takes its source in the ancient Yauri-Cochá, now called the Lauri-Cochá Lake, in the high regions of Peru, between the Andes and Cordilleras; it is there quite small; springing from its cradle, it glides an humble stream of water, under the name of the Alto Maranhão, known formerly as the Tunguraguá. But soon increasing in size, its current becomes more and more voluminous, owing to innumerable rivers, affluents, furos, paranas, igarapés, etc., which join it. Already very large, the Amazon crosses South America from west to east, a length of about 3,724 miles, of which two-thirds are in Brazilian territory, washes the shores of the state to which it has given its name, also that of Pará, and after joining the Tocantins, it finishes by rushing into the Atlantic Ocean with such violence that its dark waters form within it a vast sea of fresh water, measuring more than 124 miles.

Its current is enormous in volume. Martius has estimated it at about 499,584 cubic feet per second; he has calculated that at the mouth of the river it is 158 miles wide, and discharges 55,000,000,000 gallons of water an hour, with a current rapidity of three miles.

Rio de Janeiro, seen from S. Antonio Hill.

The Mississippi, writes Elisee Reclus, discharges four or five times less water and mud, and this same writer estimates that no other river deposits so large a quantity of alluvion. To have an idea of the mass of refuse it deposits one must imagine that it would form a block of 43 square miles in surface, and 33 feet in depth.

Part of Dr. Blumenau Street (Blumenau Colony).

This Rio-Mar (sea river) is an ocean of fresh water, dotted with floating islands, some small, others as large as the Isle of Marajó at the mouth of the river (State of Pará), which covers 2,100 square miles, or that of the Isle of Tupinambarana, with a superficies of 1,000 miles, etc.

The depth of the Amazon varies considerably according to locality and circumstances; it is from 250 to 330 feet in certain places, and attains in others a depth of as much as 1,650 feet. Its width varies from 63 miles to 6,250 feet, at Obidos, where its two shores approach the nearest. This is for its inferior course, because at the upper part, it sometimes scarcely reaches 1,320 feet in width; for example, at Bracamoros, where it still bears the name of Tunguraguá or Alto Maranhão.

Over a large part of its course, fluvial navigation, even that of larger tonnage is effectuated without difficulty; the navigable length of the Amazon itself is 3,250 miles, and it exceeds 32,000 miles if one adds to it its most important tributaries. It is impossible to enumerate completely these latter, it would become tedious; we may, however, mention the principal ones.

On the northern bank: The Putumayo, Japurá, Negro, Urubú, Jamundá, Trombetas, Curuá, Gurupatuba, Parú, Jarý.

On the southern bank: Javarý, Jundiatyba, Jutahý, Juruá, Teffé, Coarý, Purús, Madeira, Mamoré, Guaporé, Tapajos, Xingú, Tocantins, Araguaya.

The tide has a great influence on the Amazon River and extends many hundred miles from its mouth. The floods of this immense river depend principally upon the rain-fall and not upon the melting of glaciers at its source, as is generally the case with other large rivers; for instance, at one part of its basin, the rainy season occurs in March, and at another part, in September, one can therefore imagine the great volume of water this river receives.

The rainy season of March occurs on the Guaynense Plateau, and that of September in the Andine system and on the Brazilian Plateau, through which the southern affluents flow; these being the most important, the floods of the Amazon occur during the rainy period in the south, in September. At this time the average rise of water is 33 feet; the maximum it attains, 56 feet, the great flood lasting 120 days.

At the northern part of the mouth of the Amazon, a curious phenomenon occurs, called Pororóca. During the full and the dark of the moon, the tide reaches its highest point for a few minutes only. As soon as this tide begins to come, a rumbling roar can be heard far away, at a distance of at least five or six miles—it is the Pororóca approaching.

Jequitibá Tree.

AMAZON.

1—Rio Negro. 2—Amazon Monument. 3—4—5—Landscapes.

This roaring increases with the coming of the first wave, which is from 13 to 20 feet high and which covers the entire width of the channel; another wave follows immediately, then a third and sometimes a fourth.

After these waves have passed, the impetuosity and force of which nothing can resist, the tide resumes its regular course.

On the Atlantic section the most important rivers are: Oyapoc, Cunany, Amapá, Calsoene, Araguary, Parnahyba, Gurupy, Mearim, Itapicurú, Jaguaribe, Parahyba do Norte, Capiberibe, São Francisco, Iguape, Itajahy, Tubarão and Rio Grande do Sul.

Paraguassú River Falls.

Next to the Amazon, the São Francisco River is one of the most important rivers of South America, and the most important of those exclusively Brazilian; it extends over more territory than any of the European rivers, except the Volga and is the fourth largest river of the Western Hemisphere, the Amazon being first, the Mississippi second, the Paraguay third and the São Francisco fourth. It is longer than the Oronoco and one-third longer than the Rhine. Its basin is not so large, being compressed between the two ranges, the Espinhaço and Oriental.

This river rises in the high mountainous region and forms here the beautiful Falls of Casa d'Anta, from which point it flows through its narrow basin to discharge its waters into the Atlantic Ocean at 11° south latitude.

The larger part of its course is taken through the high plateau, where for a length of more than 1,000 miles it is entirely navigable and navigated. Changing its course with a slight tendency towards the east, it begins to descend from the plateau by a series of narrows, falls and cascades, of which the most noted are the celebrated Paulo Affonso Falls.

Natural Size of Famous Carbon (Black Diamond), found at Brejo.

Visconde Rio Branco Monument.

"At this point the São Francisco has received all "its important affluents, which are almost all on its left " bank. Here the entire volume of water is condensed "and, forced to go through the narrow gorge formed by "the last two rocky walls, it hurries, rushes, dashes "along, to throw itself vertiginously past a granite "acclivity and falls from a dizzy height of 268 ft., "forming four channels, many yards wide. . . . "But the most admirable of all is that the channel "being curved, the currents meet again with a tre-"mendous crash, and for many miles afar the roaring "is distinctly heard. The traveler, from a long dis-"tance, hears the dull rumbling of the Falls. . . . "It is not only marvelous—it is appalling—the ground "shakes—it seems as if many volcanoes are in a state "of simultaneous eruption. The waters increase, they "writhe and wrangle, they withdraw, only to strike "again with titanic force, causing a deafening noise. Around the Falls the entire space becomes over-"cast with mist and spray from the spouting and foaming water. And see, just now the sun "projecting its beams through the mist, lighting it with many iridescent bows, glittering with the "colors of the topaz, ruby, emerald and sapphire. O! there is no one who can describe the mighty "wonders of nature!"—(O. Bilac.)

These Falls are from 45 to 54 ft. wide, and the river, passing through so narrow a channel, gives to the current a vertiginous impetuosity.

The Paulo Affonso Falls, rivaling the Niagara in height and volume of water, present an entirely different aspect. Seen from a distance, Niagara is more majestic, but upon approaching, it must be acknowledged that the Paulo Affonso Falls excel it. The quantity of water is perhaps greater in the former, but it falls with uniformity over a wide ledge, while in the latter the volume of water, being more condensed and forced through a much narrower channel, creates a variety of aspects and singularity of contrasts that can be seen only in the Paulo Affonso Falls.

At the bottom of the precipice this raging torrent, encompassed between two cliffs, follows its course, without interruption, forming many other smaller falls, of which the Veados is the principal one.

The São Francisco River discharges 27,786,000 gallons per minute above the Falls. The height

Picking Coffee.

of this Falls is 268 ft. The above figures indicate that over two million horse power can be generated, if properly used. Its natural disposition and situation, being 250 miles only from the Capital of the State of Bahia, would make this an easy matter.

The Paraguay-Uruguay section, better known as the Prata basin, forms in Brazilian territory three distinct rivers, the Paraguay, Paraná and Uruguay.

Street in the City of Maranhão.

The geological formation of the vast territory of Brazil has not as yet been sufficently studied, but by the statements obtained at different times, it can be affirmed that the base of the great plateau is composed of metamorphic rocks of ancient formation, of which the mountains are almost all formed.

Ironclad "Riachuelo."

These mountains appear isolated in all the states, and jagged points of this special formation project visibly where the plains have been washed off and completely devastated. The Lorencian system is not very rich in minerals of commercial value, but contains extensive deposits of iron ore and, in the upper layers, particles of gold have been found.

In the eastern part of the State of Minas Geraes, which belongs to this system, quantities of precious stones have been found: crysolite, green and red turmalines, amethyst, andalusite and transparent triphane, mines of which have been more or less worked.

In the same regions, on the borders of the River Jequitinhonha, are extensive deposits of fine graphite, which compares favorably with the best graphite of other countries, even Ceylon.

The world's production of graphite is not sufficient to meet the demand, and a new source of supply in Brazil will be welcomed.

The richest mineral deposits of Brazil are found in the layers belonging to the Huronean system. Inexhaustible deposits of iron ore, of the finest quality imaginable, are found in this system, awaiting only the ingenuity of man to extract it from its beds, to be used to further his most ambitious projects.

The mining and manufacturing industries of this valuable and important metal have been worked by very primitive methods only, small forges being used in different parts of the country with as good results as can be expected. The insignificant results are used for local purposes only.

Coffee Tree.

Curytiba Gymnasium.

The establishment of plants for the development of these industries is merely a question of capital, the profits would be large and sure. Imported products of this nature could not compete with the domestic material ON ACCOUNT OF THE HEAVY DUTIES AND FREIGHT CHARGES IMPOSED.

Nearly all the gold that has been mined in the the States of Minas Geraes, S. Paulo, Paraná, Goyaz, Matto Grosso and Bahia has been taken from mines of the second series or to be more exact, in the alluvia formed from it.

In different rocks of this series gold appears in veins of quartz, accompanied by sulphate of iron, arsenic and sometimes copper, bismuth, lead and antimony. Some of the pyriteous veins are extraordinary in size and uniform consistency of this precious metal.

Gold mines in great numbers have been located all over the country and it would require but little capital to work these ores on a profitable basis.

GOLD—Gold mining has been carried on in Brazil for over a century, and although, until quite recently only the old and most primitive methods were employed, very large quantities of gold have been extracted. The results are yet more gratifying now that modern machinery is being introduced.

Extensive alluvial deposits are known to exist which contain as much as 778 grains of gold per ton of gravel. These deposits are found in some river beds in the States of Minas Geraes, Goyaz, Bahia, S. Paulo, Espirito Santo, Paraná, Rio Grande do Sul, especially in Matto Grosso and also in the district called "Calcoene" in the State of Pará.

The gold mines of Brazil are, on the average, richer than those of the Transvaal region in South Africa. The latter average from 124 to 155 grains of gold per ton of ore, very seldom reaching as much as 217 grains, as in Main Reef, whereas the average yield of the ore of the Morro Velho mines in Minas Geraes, considered a poor mine, is 387 grains to the ton of ore.

The S. João d'el Rey Company, owning the Morro Velho mine, incorporated with a capital of £500,000, has obtained profits of £350,000 per year, with indications of an increase.

There are now working in Minas Geraes eight large gold mining companies, of which five are English and one French, representing an aggregate capital of £1,500,000, besides many smaller ones in course of organization.

The gold-dredging process, for the exploration of alluvial and river deposits, is now also being introduced, thus, the "Trans Pacific Mining and Exploration Company, Limited" has commenced operating in the Cochipó District of Matto Grosso while several Brazilian syndicates have started on the "Ribeirão do Carmo" and other rivers in the State of Minas Geraes.

At the Maquiné mines, belonging to the "D. Pedro Nord d'El Rey Co." in 1868, 270 lbs. of gold were obtained from 130 tons of ore, and by the primitive process of "Panning" still in use at this mine, in 1888 the yield was nine lbs. of gold per month.

Date Tree at Pirituba.

In Rio Grande do Sul, gold is abundantly found in two distinct zones, the granite zone at Lavras, and Barcellos where it accompanies the eruptive porphyry and syenite, and in the belt of primitive chloritic—micaceous —and argillaceous slates between S. Sepé and Suspiro. The gold appears nearly always in lodes of quartz, partly as free gold, mostly, however, as sulphides, the former only being recovered.

Avenue Seventh of September, Petropolis.

Important gold deposits exist also in Assuruá, Chapada, Rio Verde, Minas do Rio das Contas, Serra do Andarahý, Serra do Urubú, Serra da Jacutinga, Rio Itapicurú, Serra do Sincorá, Mandiocal, Morro do Fogo, Parámirim, Pambú, Serra da Itiuba, all in the State of Bahia; Rio Claro, Piloes, Rio Maranhão, Trahýras, S. José do Tocantins, in Goyaz, etc.

The gold deposits of Urubúretana, State of Ceará are very rich.

The gold deposits of Bom Jesus, in the same State, in particular offer exceptional advantages; analyses made in London and the Ouro Preto Mining School showing a yield of between 38 and 177.5 grammes per metric ton (corresponding to a value of from $22.90 to $111.00 per long ton or $20.50 to $101.00 per short ton). These deposits are only 6 miles from an important city served by the railway, with abundance of water for milling and power, in a populous district where labor is good, abundant and cheap.

The total amount of gold, exported from all the States of Brazil was:

In 1901	8,965 lbs.
In 1902	7,692 lbs.

The gold recovered by the St. John d'el Rey Co. in 1901 amounted to £134,557 and another English Co., the Ouro Preto Gold Mines of Brazil recovered during the same period gold to the value of £87,821; not to mention the production of the many other minor companies.

During the first six months of last year (1903) 7,676 lbs. of gold bullion were exported from Brazil amounting in value to $2,073,000.

COPPER—Next to gold, the most valuable and abundant metal is copper, which is found all through the belt of "Jurassic" sandstones, shales and conglomerates covering the Serra de Caçapava to the extent of about 75 miles N. to S. and of almost equal width.

It occurs sometimes as green or bluish silicate of low percentage, impregnating considerable masses of rock and giving them a greenish hue, as at Caçapava, Pequerý, etc., or again as sprinkling or nets of thin veinlets of grey sulphide, also impregnating the rock as at Caçapava. Regular well-developed lodes of rich grey "glance" ore are found at the Camaquam Mines, Serro Martins, Caçapava and Seival, copper pyrites (chalcopyrite) more rarely, at the Camaquam Mines and Vaccacahý. Malachite and Azurite are very rare, red copper ore (ruby copper) has only been found, so far, at Quarahý and native copper, at Caçapava, Lavras, Vaccacahý and Quarahý.

Corcovado Railway.

1—Diamond Washing. 2—Gold Washing. 3—Hydraulic Diamond Washing.

Tacoaral Bridge, Paraná.

First in order, no doubt, are the Camaquam Copper Mines, at the S. E. corner of the above zone, on the banks of the Camaquam River. Some very rich and well developed lodes of rich grey "glance" ore, assaying up to 60 and 70% of copper, and of copper pyrites, averaging 30%, were discovered here a few years ago and reported upon, which led to the property being bought by Belgian capitalists, who organized the "Société des Mines de Cuivre du Camaquam," some three years ago. The company is doing well and is just concluding the erection of a large "Humbold" concentrating plant of smelting furnaces, and of a huge dam across the river to obtain motive power for a large electric plant.

The same rich lodes of grey "glance" appear again farther N. W., on the land belonging to Barnardino Lara, at the headwaters of the Arroio do Vargas and Irapuá River, and at "Serro Martins," the property of Dr. José Chaves, the owners having no capital to develop them. These lodes are favorably known so far by their rich outcrops and their very promising features.

The same may be said of a cluster of half a dozen mines which extend in a line on the same lode or belt, west of the town of Caçapava, near the Santa Barbara River. As far as has been investigated, they all seem to belong to a belt of shale, 20 to 30 yards wide, impregnated with silicate and carbonate of copper and rich grey "glance," standing almost on edge and running S. E. to N. W. between banks of sandstone and conglomerate. At intervals of 1 to 3 kilometres this impregnated shale crops out, forming sharp, jagged ledges, which are named by their owners the "Primavera," "Chaves," "Mathias Velho," "Leão," "Pinos," etc., Mines.

The most important, and only one so far examined, seems to be the "Primavera" Mine, belonging to Messrs. Archer and Luce, of Porto Alegre, and others. The belt has been examined here down to 100 feet below the surface and proved to contain a regularly increasing quantity of copper, in some places even native copper. Although the bulk of the impregnated rock, taken all through, does not average more than 6 or 7% of copper, it lends itself easily, by its composition, to concentration, and practical trials having been made in London over the "Wilfley" concentrator, resulted in one ton of concentrates of 50% of copper being obtained from 8 tons of the bulk rock, averaging 6%. As the quantity of this kind of impregnated rock in this region is almost inexhaustible, it would be a splendid and profitable investment for a foreign syndicate with sufficient capital to put up a large central concentrating establishment and to buy up the ore at a cheap price from all the surrounding clusters of mines to concentrate and then export it.

José Alencar Monument.

In the N. E. corner of the zone, in the valley of the Pequery River, there is a tract of shale impregnated with silicate of copper and containing also some lodes of grey copper, "glance" and chalcopyrites, which, however, as yet have not been properly investigated. Ore of the same nature appears again south of Caçapava, between that town and Lavras, in the valley of the Seival River. A. M. Beltrão, of Buenos Ayres, having discovered some well defined lodes of rich grey "glance," acquired the property and has now negotiated with a French syndicate, which is commencing development.

Paquetá.

Passing to the southern bank of the Camaquam River, the copper zone terminates at Lavras, close to the "Aurora" gold mine above mentioned. Some very rich but thin lodes of copper-glance, malachite and azurite are found here on the contact line of the "Jurassic" beds with granite and porphyry, also some native copper in small quantities. They are on the property of the "Vista Alegre Gold Mining Estates, Limt."

Farther east on the right bank of the Camaquam River, in the "Rincão das Palmas," the same formation crops out again, the rocks being impregnated with silicate, carbonate and other combinations of copper, but of no commercial value.

Bom Retiro, on the upper Vaccacahy. Here chalcopyrites, and in one place also native copper, are found accompanying several gold-lodes as mentioned under "Gold."

Quarahy-Alegrette-Uruguayana. Nothing definite is known as yet of the copper deposits of this zone, in the S. W. corner of the State, although very rich samples have come from there sometimes with ruby copper and native copper.

Rich deposits of copper exist in the States of Bahia, Ceará, Paraná, Matto Grosso, etc.

In Bahia, the deposits of Carahyba are perhaps the largest in the world, and those of Maracás are very rich. In Paraná deposits are found in Guarapuava and Ivahý.

SILVER—LEAD—There are some lead deposits in the State of Bahia, at Jequié, and Assuruá; in Paraná, at Serro Azul and Mosumbý and in the State of Matto Grosso. Silver is abundant in the first state at Serra do Assuruá, Cachoeira do Inferno, Tucano, Bom fim, Riachos, Bananeiras, Aipim, Rio da Caixa, Serra da Borracha: and in Paraná at Paranaguá, Guaratuba and Tibagý.

In the State of Rio Grande do Sul the only deposits worth mentioning seem to exist at Lavras, on the estate of the "Vista Alegre Gold Mining Estates, Limt.," where they accompany the copper lodes mentioned above. Scales of native silver are found here in a curious kind of shale yielding 29 ounces of silver to the ton, besides native gold and grains of native copper.

Farther on two lodes of rich galena crop out. The one yields 23 ounces of silver and 44% of lead, the other, yielding 20 1-2 ounces of silver, 20% of lead and 15% of copper changes afterwards into a copper lode. Galena is also reported from the Serra do Herval, near Encruzilhada and Caçapava, but nothing definite is, as yet, known about it.

TIN — WOLFRAM — MONASITE—On the crest of the Serra do Herval, between Caçapava and Encruzilhada, there is a very broken and jagged region known as the "Serro da Arvore," across which runs a belt of gneiss with quartzite and an abundance of mica.

In this gneiss 3 or 4 lodes of quartz have been proved, very

Sugar-cane Plantation in the State of Matto Grosso.

regularly developed, averaging about 1 to 2 feet in thickness and the one can be traced along the surface for a considerable distance, more than 1 kilometre. Along the outcrops of these lodes is found a quantity of crystallized wolfram or tungsten, which also impregnates the quartz and is accompanied in places by iron-pyrites and copper-pyrites. The gneiss and quartzite adjoining is in places impregnated with cassiterite, sometimes in very large crystals, and with monasite sands which are also found in quantities in the pools of the brooks running from these hills. Beautiful crystals of turmaline appear also, but are exceedingly rare.

A Settler's Home in Garibaldi.

The ground has so far only been examined superficially and it cannot be said to what depth and extent these minerals may be found.

IRON—The iron production is very small in Brazil, as aforesaid, but it is hard to point out a country where that metal may be found in such abundance. It would be almost impossible to designate each one of all the iron deposits known in the country. It has been already stated that the iron formation spreads from the States of Goyaz and Matto Grosso to the State of Rio Grande do Sul. The Ipanema Iron Mines in S. Paulo have already produced a large quantity of cast and malleable iron and the finest grade of steel. This foundry has ceased operation for many years and the Government desires to sell or lease it. Many smelting plants can be found in the country but almost all the iron used by them is imported.

Iron can be found in beds in almost all the counties of Minas Geraes; there is a region bounded by the heights of Itacolomý, Itabira, Piedade, Caraça and Serra de Cocaes, where they are found in extensive groups. This zone contains almost 3,200 sq. miles, is at a height of from 3,200 to 5,000 ft. above sea level and about 300 miles distant from the nearest port, that of Rio de Janeiro.

In this region the oxides predominate and can be divided into four classes: compact hematites, magnetites, ferruginous micachistus and conglomerates. The hematites form large sloping layers from 30 to 50 yds. high, containing usually from 66 to 70% of metallic iron, with a little silica and traces of phosphorus. The magnetic oxides form high layers in the neighborhood of Sabará, Itabira do Campo, São Miguel do Piracicaba and Gandarella. The ferruginous micachistus, commonly known as itabyritos, are formed by scales of brilliant specular iron and quartz, in alternate layers of variable thickness. Sometimes it forms a brilliant ferruginous sand called Jacutinga, precious, on account of its easy reduction. The conglomerates are formed by disincorporated fragments of other ores, especially the hematites and ferruginous micachistus incorporated with a ferruginous clay. This ore is known as Canga, and is found in large layers sometimes 30 feet high, covering the ground for hundreds of square miles. The richness of these ores is demonstrated by the following analyses, showing the wealth of some of the Brazilian iron ores:

Watering Place for Fire Brigade, Rio de Janeiro.

Medical School, Bahia.

1. Compact hematite from Itabira do Campo, analyzed by Sir E. Riley & Co. of London:

Silica	0.37 %
Iron peroxide	98.98 %
Alumina	traces
Manganese	0.38 %
Lime	0.18 %
Phosphorus acid	0.023 %
Sulphur	0.007 %
Water	0.22 %
	100.16 %
Metallic iron	69.29 %
Phosphorus	0.010 %

2. Hematite from Itabira do Campo, analyzed in the Krupp Factory, Essen, Germany:

Metallic iron	69.86 %
Silica	0.140 %
Manganese	0.007 %
Phosphorus	0.002 %
Sulphur	nihil

3. Oligist from Cata Branca, analyzed by the Pittsburg Testing Laboratory:

Metallic iron	67.95 %
Silica	1.22 %
Sulphur	0.088 %
Phosphorus	0.035 %
Water	0.36 %

4. Magnetite from Sabará, analyzed by the United States Steel Corporation Company of New York:

Metallic iron	70.23 %
Silica	0.66 %
Phosphorus	0.018 %
Alumina	0.13 %
Manganese	0.06 %
Lime	0.08 %
Magnesia	0.30 %
Water	0.66 %

5. Ferruginous conglomerate, from Gandarella, Minas Geraes, analyzed at the Mining School of Ouro Preto:

Metallic iron	64.04 %
Silica	4.78 %
Alumina	0.74 %
Manganese	0.27 %
Lime	0.25 %
Phosphorus	traces
Sulphur	nihil

In Minas Geraes there are, at the present time, two iron plants in operation: Uzina Wigg and Uzina Esperança, which use ore from Cata Branca and Miguel Burnier. The flux used is of a calcareous nature found near by, of which the analysis is as follows:

Lime	23.6 %
Oxide of iron and alumina	11.1 %
Magnesia	13.6 %
Residuous	16.5 %
Lost in the fire	35.2 %
	100.00 %

Alto da Serra Station.

Curytiba City, Tiradentes Square.

The fuel used is charcoal made in the woods belonging to the companies, at a cost of $2.31 per cubic yard, delivered at the factory. The furnaces are loaded with:

Iron ore	87 pounds	Silica	6.54 %
Flux	43 pounds	Charcoal	1.30 cubic yd.
Clay	43 pounds		

Which give a product of the following composition:

Carbon graphite	3.513 %	Manganese	0,405 %
Carbon combined	0.219 %	Iron	93.555 %
Silicium	2.409 %	Titanium	0.084 %
Sulphur	0,007 %	Copper	traces
Phosphorus	0.133 %	Arsenic	nihil

COAL. The coal formation is very extensive in Brazil, coal being known to exist almost everywhere along the coast, from the Amazon River in the north to the frontier of Rio Grande do Sul in the extreme south.

Although no systematic geologic investigations have as yet been made, it is known, by the outcrops, that the coal fields, especially in the southern States of Rio Grande do Sul, and Santa Catharina extend for several hundred miles and are formed of a number of beds, overlying each other, some of them attaining a thickness of six to eight feet, and believed to belong to the true coal formation.

The coal is of a medium hard, semi-bituminous nature, perfectly adapted for steam purposes and some also for gas and cooking. It burns quickly, gives a strong flame and a reasonable proportion of ash.

Anthracite has not yet been discovered in Brazil. Lignite is found in Minas Geraes and other States, and peculiarly interesting is the light greyish-brown bituminous shale of Marahú in Bahia, from which mineral oils are extracted. Asphalt is also known to exist in Santa Catharina. As it is the case with all the other mineral resources of Brazil, with the exception of gold and diamonds, which made Brazil famous more than a century ago, it is only quite recently that public attention is being turned towards the development and utilization of the Brazilian coal fields.

Arborescent Fern.

SÃO JOÃO Do PARAGUASSÚ DIAMANTIFEROUS SANDS

1—Paraguassú River. 2—3—Diamantiferous Rocks. 4—5—Miners' Huts. 6—São João do Paraguassú Town.

The rapidly increasing industries and the development of railroad systems are creating a very active demand for fuel, which for the most part is supplied by the forests of the country. This is causing such a rapid destruction of all forests, especially along the coast line, that the Government, authorized by Congress, and to prevent evil effects resulting therefrom, has been obliged to turn its serious attention to the exploitation of its home coal fields as a substitute for wood, as fuel. The authorities are considering this momentous question and it is very probable that they will promote and direct efficacious means to put to good use the immense wealth of the country.

Fire Brigade Headquarters, Rio de Janeiro.

Brazil is importing instead of exporting what she has to excess. Any foreign company organized with sufficient capital to open up the coal fields in the country, would be sure of profitable returns. Hitherto the only place where coal has been actually worked to a certain extent is at S. Jeronimo or Arroio dos Ratos, in the State of Grande do Sul. Here a small colliery has been supplying for years past the local demand, and the coal has been proved to be perfectly well adapted to railways, river steamers and factories, being also economic.

The secluded position, however, of this colliery, above Porto Alegre, the difficulty of means of transportation and the exceedingly high freight rates, make it impossible for this coal to be shipped to northern ports or to depend on any but local consumption.

Better are the conditions of the coal fields of Tubarão in the adjoining State of Santa Catharina.

Not only the coal beds here seem to be of better quality, greater thickness and greater extent, but a railroad existing 70 miles in length, facilitates the transport down to the sea coast, and it is calculated that with the necessary improvements in the means of transportation the coal could be brought to Rio de Janeiro and the other chief sea-ports on the coast, at a cost of $4.50 per ton.

Considering that over 1,000,000 tons of Welsh coal are imported now yearly into those ports and sold at the average price of $10 a ton, and although it is true that the calorific power of the Tubarão coal is in proportion only 77 per cent. of that of the best Welsh coal, yet it will doubtless come to be used with advantage as a substitute and prove a lucrative enterprise to those who undertake to bring it on the market.

At a place named Cedro, in the State of Paraná, district of Imbituba, the General Government has ordered that the condition of a large coal bed recently discovered be investigated and studied. This deposit is on a railroad line that goes to Ponta Grossa, one of the railroad centers of the State.

Gamboa Harbor, Rio de Janeiro.

Tijuca.

Notwithstanding the fact that the product has been taken from superficial beds only, it proves to be of first-class quality. It made quick steam and bore the full pressure in a locomotive running from the Capital to Serrinha, 36 miles, at the regular speed and keeping up to the normal time table, as well as if Cardiff coal had been used. In heating capacity, it corresponds to 100:96 compared with Newcastle coal; as coke producer 100:92, and in quantity of ashes 95:100.

Coal is known to exist in the same State in Lapa, S. José da Boa Vista, Ponta Grossa and Guarapuava in the Itajahý valley.

MANGANESE—Of equal importance with iron are the immense deposits of manganese that can be found in many States of Brazil. A few of these deposits have been worked in Minas Geraes and Bahia, but there are many others in the States of Rio Grande do Sul, Santa Catharina, São Paulo, Matto Grosso and Goyaz that could also be easily worked.

The first exportation of this mineral from Brazil was made in 1895 from the deposits of Minas Geraes and has increased from 6,765 tons exported in that year to 183,106 tons in 1903.

The Brazilian manganese can be divided into two classes: one associated with iron ore and the other with gneiss. The value of these ores is shown by the following analyses:

1. Ore from the Miguel Bournier mines, analyzed by Sir E. Riley & Co., London.

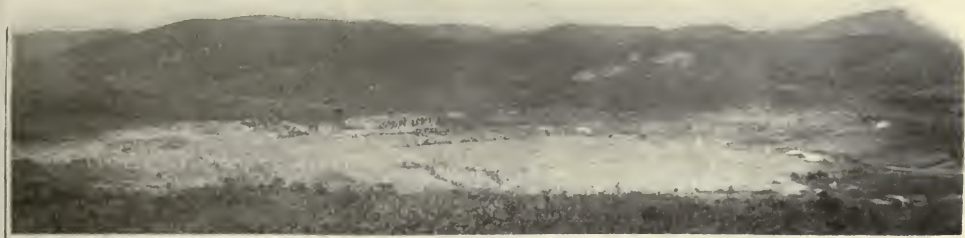
Silicia	1.27 %
Metallic manganese	55.02 %
Alumina	1.45 %
Oxide of iron	4.03 %
Magnesia	0.05 %
Baryta	1.90 %
Phosphorus	0.021 %
Combined water	4.74 %
Sulphuric acid	0.064 %
Alkalis	0.55 %
Arsenic acid	0.034 %

2. Pyrolusite sample from Queluz, analyzed by the Ouro Preto Mining Co.

Silica	0.4 %
Iron and alumina	0.5 %
Metallic manganese	61.96 %
Phosphorus	Traces

The deposits of manganese in Minas Geraes are all located near the Central Brazilian Railway or connected with it by special lines. All these deposits are found at a higher level than that of the railway. The transportation to the sea-port of Rio de Janeiro by the Central Railway costs $1.50 per ton; the export tax paid to the State, 20 cents; the entire expense of one ton of ore on board at Rio de Janeiro, including mining, never exceeds $5.00 per ton. The following table of the average analysis made in 1900 by the Carnegie Steel Works shows how rich the Brazilian manganese really is in comparison with that of other countries:

	RUSSIAN	CHILIAN	E. INDIAN	JAPANESE	BRAZ'L'N
Silica	11.000	11.510	3.290	5.600	1.400
Iron	0.710	4.060	9.230	3.620	3.390
Phosphorus	0.163	0.080	0.242	0.115	0.028
Moisture	8.500	0.410	0.930	5.630	15.460
Met. manganese	49.020	51.060	46.180	50.200	52.530

Ypiranga Monument.

Campus of D. Bosco School.

The manganese deposits of Matto Grosso, which are exceptionally rich and abundant, will be exploited by foreign syndicates. Those of Santa Catharina, near the magnificent port of São Francisco, are yet untouched.

MONASITE—The Brazilian monasites are known as the richest in thorium, a kind of rare mineral used in the manufacture of mantles for the Auer incandescent gas light. Thorium is the mineral that gives commercial value to the monasitic sand. Some monasitic sands are without this mineral and others contain it to the amount of from 10 to 12% (thorium oxide).

The Brazilian monasite generally contains from 1 to 6% of this oxide, its specific weight being 5.12.

In Brazil these sands are found on the sea coast and along the banks of some rivers, but the only deposits yet exploited are those in the southern part of Bahia, in Alcobaça, Prado, Porto Seguro, and in the State of Espirito Santo, in Barra de São Matteus, Guarapary and Beneventes. The whole deposits known in Bahia do not cover a larger area than 4 miles, and those of Espirito Santo do not exceed 2 miles, but on the sea-shore, where crystalized rocks are covered with more recent sediment, it is supposed that some deposits can be found.

The necessary cost attached to the working of this sand for exportation is confined to the extraction from the deposits, to the shipment by sea and to the export tax which is paid to the Government. At low tide the sand is mechanically separated by its own gravity in running water, an easy operation on account of the great weight of the sand.

As the monasitic sands are generally found on the seacoast in the zone belonging to the General Government of the Republic, the Federal Government supervises this work, which is leased annually to the highest bidder.

The following analysis of a sample of monasitic sand—not a characteristic one, however, because of the percentage of thorium being far below the average—is quoted to show the general composition of the mineral only:

Corium oxide	32.92%
Didymium oxide Lanthanum oxide	7.93%
Zirconium oxide Vitrium oxide	13.98%
Thorium oxide	1.48%
Glucinium oxide	1.25%
Lead oxide	Traces.
Iron oxide	1.83%
Alumina oxide	1.62%
Lime oxide	1.20%
Tantalic acid	.66%
Titanic acid	4.67%
Phosphoric acid	18.38%
Silicic acid	6.40%
Loss and not determined	7.72%
	100.00%

Lewistonia Palm Tree.

MARAHÚ PETROLEUM WORKS.

1—General View of Works. 2—Candle Factory. 3—Soap Factory.

The total known monasitic supplies are:

NORTH CAROLINA—200 tons per annum, apparently in perpetuity.

PRADO—1600 tons per annum can be exported without injuring the capacity of the monasitic bearing clays.

ESPIRITO SANTO—Total estimated weight of monasite, about 16,000 tons.

NORWAY—Produces small quantities of monasite, which thus far has not entered the market to any extent.

Drill of Fire Brigade, Rio de Janeiro.

Ever since the lamps of the Welsbach patent have been so extensively used, the present demand has greatly increased. It is impossible to speak with absolute certainty now, but taking 4000 tons as the average output per annum, it is very probable that the end of the present decade will see a very serious shortage of thoria. Unless further discoveries of large beds are made, it will be necessary to find some substitute for this substance in the manufacture of incandescent mantles, such as zirconia. Zircon, which accompanies monasite, is rich in it and is far more plentiful, but the great drawback to its use is the disagreeable greenish color of the light which is emitted by mantles composed wholly or partly of it.

DIAMONDS—The existence of diamonds in the auriferous districts of the north of the State of Minas Geraes has been known with certainty since 1789. From this time to the present this district has not ceased to yield annually a notable quantity of these precious stones. Since 1870 the output has considerably diminished, owing to the depreciation in price following the discovery of the great deposits at the Cape of Good Hope, and the enormous number of stones thus coming on the market.

To-day, despite these unfavorable conditions, in all the diamantiferous basins of Brazil one still finds the native workers, whose daily finds, however, alone prevent the industry from dying out.

These basins are situated in the States of Minas Geraes, Bahia, Paraná, Goyaz, Matto Grosso and São Paulo. In other States the existence of diamonds has been ascertained, but I propose to occupy myself with the deposits having some importance, of which the locality is well known. Thus far, as with gold, the State of Minas Geraes is richest in diamonds. Here, as elsewhere, they are found in quaternary alluvial deposits. Only two deposits are yet known which do not conform to this rule—until recently considered absolute. In Minas Geraes the most important deposits are those of Cocaes, forty miles north of Ouro Preto; those of Diamantina, the most important of all, comprising a belt of country one hundred and twenty miles in length by twelve to twenty miles wide, including the basins of the Rivers Jequitinhonha, Doce and São Francisco from the valley of Conceição to Jequitahý; those of Grão Mogol in the Jequitinhonha; those of Abaeté and affluents of the São Francisco, and those of Bagagem in the Paraná basin.

Anna Rosa Institute.

Normal Institute, Bahia.

In the State of Bahia the deposits cover vast areas in the Rio das Contas, near the towns of Lençoes and Sincoral, by which names the workings are known. In the Rio Pardo basin, some years ago (1886-7), were discovered, near its mouth, two diamantiferous placers which bear the name of Cannavieiras.

At Paraná the diamantiferous gravels are worked by a company.

All these deposits present the same characteristics, whether it be in the water courses, in the river banks, or on the plateau traversed by small streams, which are almost dry in winter, or in the mountain gorges. They are formed of a calcareous bed, locally termed "Cascalho," consisting of pebbles much rounded by attrition in the water courses, and covered by a bed of stones, more or less argillaceous, with their angles very slightly rounded, and called "GORGULHO," in the mountain gorges, on some of the plateaus, and in other localities by a bed of mould and earth.

The true diamond bearing strata include a number of minerals, of which forty have been identified, and are on exhibition at the Ouro Preto School of Mines. These minerals form, as it were, the "satellite" of the diamond. The most frequent and abundant are titantic acid (rutile), the "Agulhas" of the miners, and anastase (siricoria), a rutile pseudomorph of anastase (Captivos de Cobre), rounded turmaline (feijões), aluminum hydrate with phosphates of the rare earths of the cerium group (Favas), hematite, magnetite (esmeril, cabaclos, lustroso), and minerals at present rare such as xenotime and monasite. Gold exists in grains and flakes in all the diamond workings, and in quantity often sufficient to pay cost of working. Platinum is less frequent, but is found in all the deposits in and around the town of Serro.

In the deposits of São João da Chapada the diamond is found in situ, and is worked in altered schists, often transformed into argillaceous earths of varying color, of which the Ouro Preto School of Mines also possesses a collection. These schists, often impregnated with small octahedral crystals of martite, are traversed by veins of quartz and accompanied by titanic acid similar to those which occur in the topaz deposits of Ouro Preto; both belong to the same geological horizon.

Near the town of Grão Mogol diamonds are found in the micaceous quartzites or itacolumites, passing into "putting stone" where the quartz is found in a rock of the same nature as in the preceding case.

The search for diamonds is always preceded by that for gravel (cascalho), which announces the presence of the precious stone and the discovery of a bed of the cascalho, not yet explored, is practically always followed by that of the diamond.

In the Jequitinhonha District a few cubic meters of gravel, accumulated by the rock-bars crossing the beds of the rivers often furnish hundreds of thousands of dollars' worth of diamonds. The work is carried on by isolated workers known by the name of "Garimpeiros," or by local companies. The former are able to work only when the streams are low. The latter often undertake very considerable engineering operations in diverting streams and building barrages, so as to lay bare the rich bed gravels. In either case the gravel is washed by the most primitive methods, by which the diamond is obtained in "batéas" or panning dishes somewhat deeper than those used for gold. The diaman-

Santos Dock.

On the Sea Coast.

tina basin is the only one remaining in which work on a large scale is carried on. In other localities one encounters only the isolated workers. The most productive centers are those of Serro, in Diamantina, which is subdivided into a number of small districts, such as those of Curralinho, Caetémirim, Jequitahý, etc. Those of Terra Branca, Grão Mogol, Sincoral, and Cannavieiras—the last two being in Bahia.

In general, Brazilian diamonds are well crystallized and colorless. Colored stones are rare, but of good "water". Bort and carbonado, or black diamond, are much rarer. This last is found in the Bahia deposits, but it is also encountered at Terra Branca, in Minas Geraes.

Brazil has not yet produced many large diamonds; among the paragons one may cite the Star of the South, weighing 254.5 carats rough, and 125.5 when cut, which was found at Bagagem in 1853, and the Dresden Diamond, discovered in the same locality in 1857. It weighed 117.5 rough, and 63.5 when cut. Both belong at present to an Indian prince, and were sold, the first for $200,000, and the second for $100,000. Small stones (vitriers) are very frequent. A few years ago Brazil exported all her diamonds in the rough. At present a number are cut in the country. In Diamantina there are nineteen lapidaries, employing one hundred and forty-six workmen, and cutting four hundred and sixty carats of diamonds per month, at a cost of three dollars per carat. In the town of Serro there is one lapidary's establishment, and in Jequitahý two-thirds of the stones cut here are exported, one third is mounted and sold locally. The exact figures as to production are available for Minas Geraes only:

The Diamantina District produced in 1887	3,481
The Serro District produced in 1887	717
The Grão Mogol District produced in 1887	537
The Jequitahý District produced in 1887	788
Other districts (estimate)	150
Total Grammes	5,673

As diamonds are already worked in Bahia (Districts of Sincoral, Lençoes, and Bom Jesus), in São Paulo (District of Rio Claro), in Goyaz, at Dois Irmãos, and in Matto Grosso in many water-courses, I believe I am within the truth in estimating the diamond production of Brazil at 8 kilograms annually. The average price in the country is about $100 per octave of 3,589 grams (18 carats local of 0.1922 gram.), consequently the value of the output would equal about $200,000. I have, in a previous publication, estimated the total production of this precious stone up to 1880 at about two and a half metric tons. It is evident that this estimate represents, roughly, Brazil's total production of diamonds. (BRAZILIAN MINING REVIEW, RIO DE JANEIRO, BRAZIL, S. A.)

Last year Brazil exported diamonds to the value of one million dollars and two new companies have been formed in London to explore for this precious stone, namely, the Brazilian Diamond Exploration Company, with £225,000 capital, which will work in Bahia, and the Brazilian Diamond Fields Corporation, Limited, with a capital of £150,000 to work in Minas Geraes.

Polytechnic School.

Kindergarten, Bahia.

Carbonates, stones used for diamond drills, are found in Bahia and Minas Geraes, the greater part, however, come from Lavras Diamantinas, Sincorá and Chapada. The largest carbonate stone ever seen was found in 1895 in Lenções (Bahia); it weighed 3,150 carats and was at first sold for $16,000, later for $25,000. Taken to Paris it was broken into small pieces to be used in the industry. Some other stones from 500 to 900 carats have been frequently found in the same place.

In many of the Brazilian states are found costly specimens of topaz of fine color and lustre and valuable emeralds, sapphires, rubies, amethysts, euclassas, beryls, chalcedonies, turmalines—not only black, but blue and green, the latter being known as Brazilian emeralds—crocoites, scheelites, stolzites, symophanes, disthenis, triphanes, staurotita and many other more or less precious gems.

Rock crystal of the first water and of immense volume, as well as beautiful and valuable crystals of amethyst and chrysolite, are found in Minas Geraes, Goyaz, São Paulo, Bahia and Paraná.

The variety of marble of all colors and designs is enormous. The existence of springs of mineral waters, rich in ferruginous deposits, is well known. The carbonic water generally contains a large amount of carbonic acid and in a small proportion bicarbonate of sodium, magnesium, calcium, chloride and sulphate of sodium.

These Springs are popular resorts, the water being used for medicinal purposes.

In the State of Minas Geraes sulphur waters are found, and in the State of Santa Catharina the well-known thermal water.

In the southern part of Bahia there are large deposits of turf and legnite, very interesting on account of peculiar substances found around them. The most noted of these is a kind of yellow bituminous schist, with impression of plants, very rich in volatile substances of the following composition:

Carbon	63.46 %
Hydrogen	9.87 %
Oxygen	7.95 %
Nitrogen	1.45 %
Ashes	17.25 %

The ashes contain 28.8 % of matter soluble in diluted hydrochloric acid:

Silica	1.09 %
Oxide of Iron and Alumina	26.70 %
Lime	0.20 %
Magnesia	traces
Alkalis	2.80 %

The insoluable portion contains:

Silica	61.47 %
Oxide of iron	9.16 %
Lime	0.68 %

Dry distillation, slowly and carefully carried out yields the following results:

Below 150 degrees Centigrade:

Water, strongly charged with acetic acid	10.0 %
Oil of a wine-yellow color (Sp. Gr. 0.812)	9.74 %

Santos Station, S. Paulo Railway.

150 degrees—270 degrees Centigrade:

Dark brown oil with green reflection	21.84%

270 degrees—350 degrees Centigrade:

Black oil (Sp. Gr. 0.884)	5.74%
Porous, brilliant and friable coke	37.00%
Loss (gases)	15.58%

After purifying the various products by treatment with sulphuric acid and alkali in succession and distillation, the following results were obtained from one ton of the mineral:

Petroleum spirits	12 litres
Illuminating oil	54 litres
Intermediate oil, serving for gas manufacture	48 litres
Lubricating oil	70 litres
Petroleum residue	85 litres
Paraffine wax	568 kilos
Losses	97 kilos

Maniçoba Tree lactex crop.

Asbestos, the industrial application of which is daily increasing, is found in the neighborhood of Ouro Preto, at Rocas Novas, on the scarp of the Serra de Caraca in Minas Geraes and also in the States of Bahia and Goyaz.

Rich deposits of mica are common in São Paulo de Muriahé, Bicas, Pirunga and São Domingos do Rio do Peixe, as well as in the States of Goyaz, Matto Grosso and Bahia.

FORESTRY. The Brazilian flora may be divided into two sections; the equatorial, comprising that of the Amazon and its affluents, which Humboldt called "Hylœa," and the tropical meridional.

Notwithstanding its resemblance to the other portion of the Brazilian flora, that of the Amazon has many distinct characteristics which constitute in themselves separate sub-divisions. The Amazon forests cover an area of about 2,000,000 square miles, equal to two-thirds of the area of the United States, or ten times that of France; and this forest, the largest in the world, has two different aspects.

All the land which is submerged by the periodical floods ot the river produces a special vegetation and the trees are not as high as those in dryer places. The Indians noticed this and gave to that region the name of Caá-iapó, or immersed forest. Here the trees are of medium size and have abundant dark green foliage. This vegetable association is composed principally of Myrtaceous, Guttiferous, Meliaceous, Bombaceous, Mimosas, Cinchonaceous, Anonaceous, all of them surmounted by the elegant capitals of innumerable palm trees, whose stems rise as architectural columns over the dense woods. The lianas and cipós which characterize all the other parts of the Brazilian forest and render them so picturesque,are not seen here, and it is only when the water recedes that some Convolulaceous of slender stem wrap themselves around the trunks of the trees. At this time, on the washed land, grow graminea of rigid context, innumerable Seloginellas and many other monocotyledonia, which spring up in a luxuriant exuberance on the banks of the river. The American willow (Salix Humboldtiana), intermingled with musaceous and varied palms of the Cyperaceous and Dwarf Utricularia genera form real walls on the banks of the river.

Fiscal Island, Rio de Janeiro.

COFFEE FARM IN SÃO PAULO.

1--Picking Coffee. 2—Loading Coffee on Ox-Cart. 3—4—Washing Coffee. 5—Drying Yard. 6—Preparing for Shipmen

Proceeding by steamboat upon this majestic river, the traveler can reach with his hand the branches of the trees which overhang the water. Bending low over the waves of the sea-river, the trees are truly splendid with their tufted manes or open fans, shaking their flowery summits garlanded with pendent wreaths of umbellas.

Ytapuca, Rio de Janeiro.

But this is not the big forest—it has not the hoary thousand years of age of the dry forest Caá-eté, (emerged forest) as the Indians call it.

It is in this forest that trees may be found like those which Wallis saw near the Rio Branco River, whose branches could give shelter to many thousand persons. In this part of the forest there are trees 300 feet high, bare of branches up to a considerable height but entwined with innumerable lianas, resembling the cordage of a sailing vessel, all covered with varied and brilliant flowers. Down upon the ground between the intricacy of roots and lianas grow gigantic ferns, Arsideas, Scitamineous, Epiphites and Bromeliaceous, filling the few open places left and making the whole forest a compact mass.

In this part of the Amazon forests predominate the Anonaceous, Myrtaceous, Sapotaceous, Aristolochias bearing strange flowers, Minosaceous, Vochysianas, Apocynaceous, Bignoniaceous, Piperaceous, Bromeliaceous, all kinds of palms, Euphorbiaceous, Cœsalpinias. The leaves here are of a lighter color and persistent; and the woods are much harder and more resistant than those of the lower forest. By the side of this compact forest appear, now and then, at the edge of the plateaus, large areas covered here and there with little jungles; they are higher at the centre and slope down till they reach the common level. The vegetation that predominates in these jungles is of the same kind as that of the forest but here the palm trees are not as high, they are, however, so entangled with the lianas and the bending branches that it is difficult to penetrate into those domes and tunnels of foliage.

In order to give an idea of the exuberance of this vegetation it can be stated that Griseback found more than 3,000 species, on the northern margin of the Amazon River alone.

In those forests can be pointed out as typical beauties, the Munguba (Bombax Munguba) the Ambauva and Samauma (Eriodendron Samauma) and the palm trees; Murity, so handsome as well as useful, Jussara, Assahy, the noble Inajá (Mauricia Flexuosa Euterpe sp. E. edulis Maximiliana regia), the Myristica sebifera, the Schousboca, the Macrolobium bifolium, the Carolinea princeps, of gigantic flowers, the Baxiuba (Iartea scorisa), the Bacava (Enocarpos Bacava), etc. Of the great number of useful plants we cannot refrain from naming the Pará chestnut (Bertholetia excelsa), the Symphonea elastica, rubber tree, the sarsaparilla (Smilax sals. P.), the Bacury (Symphoneo coccinea) and the cocoa tree (Theobroma cacao), etc.

Entirely different is the disposition of the Brazilian flora in the rest of the country, near the tropics. The sub-regions are better distinguished: and, as the seasons become accentuated the farther south we go, the more striking is the difference in vegetation. In the under tropical region, three entirely different zones can be distinguished; the north littoral from Maranhão to Pernambuco—dry sandy zone; south littoral zone, of woods; and central zone, of fields.

ces of Secretary of Agriculture and Treasury.
São Paulo.

Rio Vermelho, Bahia.

The forests of the Amazon end at the larger delta at Pará, and from this point southward begins a stretch of sandy land, where the margins of the river only are tinted in green by the vegetation of Rhizophorous, Conocarpus and Aricenious. This characteristic of the littoral maintains itself down to Saint Agostinho Cape. It is only south of the Lower São Francisco River that the virgin tropical forest begins—the zone of the Brazilian Atlantic forest. As far south as the mountainous region of the Rio and Minas States, the forest is very wide; on the sea-coast it comes quite near the ocean and towards the west it extends into the interior of the continent following the entire course of the rivers, such as the Rio das Contas, Jequitinhonha, Mucurý, Doce, etc. South of Rio de Janeiro the zone begins to narrow down, comprising the little strip encompassed between the coast-line and the Serra do Mar (Sea range), on the west side of which the field zone of the interior begins. With this zone the forest of the coast is at an end. From that point south the shore is sandy.

In its general aspect of exuberance and richness the tropical littoral forest resembles greatly the Amazon forests, being still fuller and more beautiful because of its variety and the unevenness of the land. Here the shades of green are not so monotonous, they are more cheerful and warm; the landscape shows more variations; the slope of each range unfolds a new sight. The flowers are more variegated, the species more particularized. The forests, woods and jungles are all of the SELVA AUGUSTA type. In the deep silence of its quietude, life unfolds and animates the smallest corner, trunks that stand up like towers, palms and arborescent ferns elegantly poised on their stems, lianas that interweave, twining themselves around the trees like serpents, epiphetas that give a new green color and life to old trunks, bamboos that murmur in the least zephyr, orchids and climbing plants hanging their festoons on the branches, sparkling with sun-light, shedding thousands of odd colors and embalming the air with their extravagant perfume.

After traveling under this virgin forest and reaching a curve of the high slope of the range, the vision spreads for a distance of miles and miles over forests that cover all the slopes far away. Then over the green roofs of the trees can be seen predominating conspicuously the sovereign Jequitibá (Curatahi Legalis), whose majestic beauty no other species can dispute, not even the elegant Jacarandá or the gilded Ipé or the slender Bacurubú in its deep green. In the outline of the forest we see towering on high the imposing Paineiras (Bombax) shaking smilingly their leafy waves over the fair Sapucayas arrayed sometimes in rose, sometimes in white; the Ventrudas Tuberculatas (Barrigudas) and the Ambahubas where the indolent unau sleeps; and a good eye can even distinguish the merry Cœsalpinas, all covered with pendent flowers, the slender and tremulous Laurel, the Maris and Andiras spiked and rough, the lustrous foliage of the Saboeiro (Sapundum saponania), the well-turned and light greyish trunk of the Jenipapo, the rotundous cedars, the dome-like Pau d'Alho and the gothic species of the Embiribas—and scattered here and there the rolled-up caps of the palm trees—Jussara, Palmito, Indayá, Tucum, Piaçava and many others, so fair, as well as useful, and much lauded. On the rugged slopes grows up the gigantic cactus, a shining green taper, whose top and edges are beautified by flowers and ruby fruits, surrounded by the Bromeliaceas, the Aganes and the Dwarf Palm trees.

Government Palace, São Paulo.

Leme Fort, Rio de Janeiro.

Towards the south at the edge of the plateau, the forest changes entirely in aspect; here begins the pine forest composed exclusively of the well known and beautiful Araucarias whose fruit is duly esteemed and sought after.

To the west oī the forest zone begins the fields zone which are entirely different from the Venezuelan llanos and from the Argentine pampas. There are large zones on the plateau, undulated ground covered with graminea, forming good pastures interspersed by valleys covered with woods, or, interspersed with little jungles or shrubberies, presenting always a varied aspect designated by the names of Campos Geraes, Cerrados, Chapadões, Carrascaes, Agrestes, Taboleiros, Chapadas. Grassy land entirely free from trees or shrubs is not found there to any great extent. In the mountainous part of the interior there are large forest zones covering the highland in the northern part of the region and the valley in the southern.

In the Paraguay valley are found large forests, not so rich as those of the Amazon, but well provided with valuable species of which the Ipecacuanha and the Matte must be pointed out. Among the different kinds of graminea and other plants of these fields can be mentioned the Mimosas, Pospalum, Panicum, Triscalhines, Cerichrus, Pappophorum, Chloris, Grymophogon, etc., and the agrestes: Cynodon, Diectomes, Trachypogon, Antherteria, Cragrotis, etc.

The Brazilian flora is composed of more than 17,000 species of which a very large percentage is used for industrial and medicinal purposes, and for ornamentation.

For naval and civil construction, the Brazilian forest has the best woods, and for cabinet work the most beautiful known to the trade.

For construction purposes can be pointed out: Peroba (Aspidosperma peroba), Tapinhoan (Sylvia navalium), Cabiuna or Black Jacarandá (Dalbergia nigra), Pau Brazil (Cœsalpinia echinata),

Interior of Government Palace, Rio de Janeiro.

STOCK FARM IN SÃO PAULO

1—Hog Pen. 2—Cattle. 3—Sheep. 4—Cattle.

Garibaldi Village.

Bacurý (Platonia insignis), Sucupira (Bowdichi Major), Aroeira (Astronium) Pau d'Arco or Ipé (Tecoma speciosa) Pequiá Amarello (Aspidosperma sessiliflorum), Massaranduba (Mimusops elata), Pau-ferro (Cœsalipnia ferrea), Cedar (Cedrella Brasiliensis), Louro (Cordia frondosa), Itaúba (Acrodiclidium Itaúba), Sapucaia (Lecythis Pisonis), Barauna (Melanoxylon Barauna), Paracauba (Andira), Grapiapunha (Apuleia Polygamea), Pequiá marfim (Aspidosperma eburnea), Guarabú (Peltogyne Guarabú), Angelim amargoso (Machoerium andira) different Canellas (Nectandra and Cordia), Mirindiba (Terminalia Mirindiba), Grucahý de azeite (Moldenhauria), Ipé tabaco (Tecuma).

For cabinet work can be named: Oleo (Mirocarpus frondosus), Muirapinima (Centrolobium paraense), Cajarana (Cœsalpinia monosperma), Vinhatico (Echyrospermum Balthasarii), Pau setim (Aspidosperma), Jacarandá roxo (Machoerium firmum), Gonçalo Alves (Astronium fraxinifolium), Sebastião d'Arruda (Phylocalymma floribundum), Pau marfim, Muirapiranga (Cœsalpinia), etc

Among the immense variety of palm trees are found a great number, whose products are used by many industries: Piassava (Altalea funerea), the horny fibres of which are much sought after, and the carnauba of universal utility.

The carnauba (Capernicia-cerifera) abounds uncultivated in the States of Ceará and Rio Grande do Norte. Surely there is no other region where a tree with so many and varied applications can be found. It resists long and severe droughts, retaining its freshness and luxuriance. The roots have the same medicinal effect as sarsaparilla. From the trunk can be taken light and strong fibres of a beautiful brightness, beams, rafters, etc., for construction, and durable posts for fences. The terminal bud, when young, is a nutritious aliment and is also used to make wine, vinegar, a saccharine substance and a starch like sago, with the same qualities and taste. The hard part of the stem can be used for water pipes, and the softer inside, resembling cork, can be made use of in the same manner as this substance. The fruit is savory and the seed oleaginous and emulsive. From the stem is made a flour something like corn flour and a liquid equal to that of the coco-nut. From the dried straw can be made hats, brooms, mats and baskets. This straw is exported in a small quantity to Europe, to be used for hat manufacturing and this exportation is worth $250,000 yearly. From the leaves is extracted a kind of candle wax very much sought after in the country and exported, also. The domestic use of this wax was 734 tons, the exportation 871 tons and the total amount produced valued at $375,000.

Tinctorial plants: Urucú, Bixa, Pau-Brazil, Anil, Jatajiba, etc.

Oleaginous plants: All the palm trees, the fruits of which are oily, ricinus (ricinus communis) Pará nuts, etc.

Fibrous plants: All the Bromelias, Imbé, Gravatás, Agaste, Paper tree (Lasiondra papyrus) Guaxima, Caruás, Tucúm, etc.

Medicinal plants: Innumerable fruits, flowers, barks, roots and leaves; Jaborandy, Sarsaparilla, Ipeca-Cafferona (Tochia Guyanense), Caroba,

Settler's Home, Corn Cultivation.

Governor's House, Bahia.

Guaraná, Muruhé, Jalapa, different Cinchonas, Pau-Pereira, Avenca, Canica, Tamaquaré, Jatahý, Angico, Andiroba, Manacá, etc.

In aromatic plants there is a great wealth; Vanilla (Vanilla armatico), Cumarú (Dipterix), Guynary (Diotea), Brazilian nutmeg (Criptocaria), Pichurim (Nectandra), etc.

Among the many plants rich in tannin, can be named: Barbatimão (Striphnodendron), which has 80 per cent of tannin, Mangue (Rhizophora) producing five times more tanning substance than oak, Jurema (Acacia), Aroeira (Schimus), etc.

The native plants that produce nutritious fruits are: Assahý, Araucaria, all varieties of bananas, Sapucaia, Bacurý, Soroeira, Mangabeira, Mucurý, Genipapeiro, Cajueiro, Imbuzeiro, Mamoeiro, a large variety of Maracujás, Abieiro, Abricoteiro, all the innumerable species of Myrtaceas, etc.

FAUNA. Of the six zoologic sections, South America forms a special one—the Neo-tropical—which certainly is the most curious and distinctive; and of this Neo-tropical section, Brazil occupies a very important sub-division, because the most abundant and characteristic types, determining this section of zoological geography are found in this country.

The study of the Brazilian fauna, includes all the known fauna of South America, except four or five genera peculiar to the Andes region.

With its variety of climate, fertility of soil, luxuriant growth of vegetation, Brazil could scarcely have a less abundant and rich fauna; a logical conclusion of natural economy. Fields, forests and jungles, lakes and rivers, gulfs and bays, extensive mountain ranges and valleys give to Brazil the elements and necessary conditions for sheltering and nourishing the richest and most varied fauna. In reality this country possesses a wealth of resources in every division of natural history, if we except the class of large mammals; a curious anomaly, but one which gives the Brazilian fauna one of its distinct characteristics. The Brazilian fauna is a typical one and certainly the most curious of the whole planet.

Very richly endowed in all its orders and classes, it is poor in the mammiferous; poor in the number of families, genera and species. Entire orders of the mammiferous,—insectivorous, are not at all represented here and almost all those of the existing orders are small in size, if compared with those of the old world. The Brazilian bear family is represented by the insignificant Coati (Nasua), the lion by the puma or onça sussuarana (Felix concolor) and the large ruminants and pachyderms by the deer (Cervus) and antas (Tapirus americano).

On the other hand, there is an order—the Rodents—the largest specimens of which, the Capivara, (Hydrochoerus capibara) is peculiar to the Brazilian fauna, as are also the rodents with hoofs, such as the pacas, cutias, etc. The remainder of the animal kingdom of Brazil is, however, plentifully represented, and surpasses in extent the fauna of any other country.

The variety of birds and insects is larger than in other parts of the world.

The abundance of fish is unequaled,—the Amazon River alone having more than 2,000 species.

In insects and arthropoda in general, the

Rio Negro Bridge.

abundance is wonderful. Within a radius of 3,300 ft. Bates could collect 700 species of insects in Pará, while the whole of Europe cannot show more than 390 species of these classes. In fact the same conditions exist pertaining to all the other animals. Bates also ascertained the existence of 14,712 species of animals in the valley of the Amazon, of which 8,000 were entirely new to science.

Bank Head at Alto da Serra.

All the divisions of the Brazilian fauna are of great interest to naturalists: the mammals because of their variety, and the others on account of their abundance as well as their variety.

The mammal class is characterized by its Edentata: Anaus (Tardigrada, Bradypodas family), lazy and stupid animals; armadillas (Effodentia, Dasypoda family), ant-eaters, which have a horny carapace and Tamandús (Myrmecophaga). These Edentata varieties, last survivors of an abundant family, now almost extinct, are peculiar to South America. The Didelphis family of the Marsupian order, represented by Didelphis cancrivora, Chironectes variegatus and Didelphis murina and cinerea (Gambás, Sarigué, rato do mato, etc.), is also peculiar to this continent.

The Marsupian order has five families: four belong to Australia and the fifth to Brazil; but it must be noted that the South American Marsupians make the best distinction of the group.

With reference to the quadrumanous order, Brazil has more than 50 species of monkeys of the following genera: Stentor, Atelas, Lagothrix, Cabus, Pithecia, Jacchus, Midas, Callithrix, etc. Among these is the spider monkey, the largest of South America, which has a prehensile tail used as a fifth hand.

The South American monkeys are distinguished by their flat nose with thick septum and by having 36 teeth, while those of the old world have a nose more like the human one, with thin septum and 32 teeth like man.

The Brazilian rodents are the largest of the order. There are also different genera found, forming a sub-order and distinguished by the plain instead of the cloven hoof, which they generally have. This order is represented by the Subungulata family to which belong the Capivara (Hydrochoerus capibara) the largest of the rodents known and whose hide is much sought after, the Paca (Coelogenis paca) which has edible and savory meat, the Agouti or Cutia (Dasyprocta aguti, Chloromys aguti), the Mocó (Cavia ruprestis), the Preá (Cavea aperea).

The carnivorous order is represented by the Jaguar, Puma Jaguatirica, Maracajá and many other kinds of wild-cats.

The genus canis is represented by the Brazilian fox (Canis Brasiliensis); and field fox (Canis vetullus).

Of the Marta species there is the Lontra (Lontra Brasiliensis); two kinds of Galictis, different Mephitis, etc.

The ursideus are represented by the Guaximim (Procion carnivorous) and the Coati (Nasua). Of the ruminant order there are different deer: Cervus paludosus, Cervus campestris, Cervus nemorivagus and Cervus rufus; of the pachydermous order:

Saw-mill at Garibaldi, Rio Grande do Sul.

1—Tracheotomia Operation. 2—Pharmaceutical Laboratory. 3—Snake Pen. (Extracting the poison of a snake.
4—Hospital Room. 5—Extracting the Vaccine Lymph from a Calf. 6—Group of Doctors and Nurses.

three varieties of wild-hog (Dicotyles) and the Tapir or Anta (Tapirus americano) the largest of the Brazilian mammals, resembling a large hog by the conformation of its body, the elephant by its trunk and the horse by its mane.

Fifteenth of November Place, Bahia.

In the Amazon River is found a special kind of dolphin (Plotamista Amazonica),—also another cetaceus called the Ox-fish (Mariatus Americanus). There are whales and many cachalotes in the sea.

The fishes belonging to this vast country are of no less importance and value.

Agassiz found two thousand species of fish in the waters of the Amazon, which is double the amount of the Mediterranean Sea, and more than live in the Atlantic Ocean. This number will appear even more astonishing, when it is known that there are no more than two hundred species of fish in the European rivers and lakes; one tenth only of the number existing in the Amazon. The chelonians are prodigiously abundant, principally of the fresh water kind; of these we must specially mention the large tortoise of the Amazon (Eneys Amasonica), excellent as an aliment and whose shell can be put to the same uses, as that of the ocean turtle.

This kind of tortoise is found in such abundance in the Amazon, that during the Martius voyage along the river 15,000 barrels of turtle butter were made, using 1,600 eggs of that animal for each barrel.

There is not one order of fish, that is not represented in the Brazilian seas, rivers and lakes.

Of the six orders of fish, one must be mentioned for its very curious and striking features, the Dipnoi order—a kind of fish, having two breathing apparatus, living as well in the water as on land. They breathe through the gills or through the lungs, having both, thus forming the transition specie between the fish and land animals.

This order is composed of three species only, one of which is peculiar to Brazil—the Lepidoziren. There are also three species of electric fish, of which one is called the Gymnote. The abundance of the Brazilian waters makes fishing an easy matter and the industry is susceptible of much development. In Rio de Janerio Bay alone, 94 species of fish can be found.

The following fish found in the Brazilian seas could be exploited for industrial purposes: whales and sharks for manufacturing fish oil; and for canned or dried fish, sardines, badegete, tainha, garopa, roubalo, cherne, badejo, dourada, pacú, cavalla, pirarucús, etc.

The Brazilian fauna is also noted for its large variety of birds, numbers of which delight us with their sweet songs, while others are renowned for their beauty and brilliancy of plumage. Such birds as the parrot, the wild-duck and the ostrich, found in large flocks, could be made use of to furnish material for industrial exportation.

The climate of Brazil varies with the zones, but in all of these the best hygienic and salubrious conditions exist.

Bahia Street in Bello Horisonte, State of Minas Geraes.

View of Lard Factory, Rio Grande do Sul.

In the tropics it is naturally hot and damp during the rainy season, but temperate and dry the remainder of the year. However, even in this zone it is mild and agreeable on account of the profusion of luxuriant vegetation, the prevailing winds and the high elevation, which modify the roughness of the climate so peculiar to countries situated in the same latitude.

From the Capital to the Southern part of the Republic, in the Temperate Zone, the climate is pleasant at all times of the year. This agreeable temperature exists in the States of Saõ Paulo, Paraná, Santa Catharina, Rio Grande do Sul and Minas Geraes.

The Brazilian flora is one of the most wonderful in the world for the wealth and variety of its important species. The vegetation shows itself vigorous and luxuriant throughout, enchanting the eye with its brilliancy and diversity of colors, while the imposing proportions of the trees add majesty to the scene. The change of the seasons has little or no effect upon vegetation, and as may be said, the flora of Brazil enjoys a perennial spring.

AGRICULTURAL ZONES—On account of the different aspects and natural conditions of the Brazilian territory—the quality of the soil, elevation of the land, water system, the medium temperature, distribution of the forests, plains, etc., Brazil can be divided into nine agricultural zones, distinguished by the kind of the natural productions and by their climatic uniformity.

Going through the country from north to south, there are, in the first place, the valleys of the Amazon, of proverbial fertility, made so by floods and periodic alluvions of the river and by the abundance of rainfall.

As spontaneous vegetable products of this zone there are found and exploited: rubber, which trees form large forests (seringaes), cocoa, vanilla, nuts, woods for building and cabinet work, medicinal plants and a large variety of fruits.

The animal products are represented by the Pirarucú and many other fish, which are prepared for exportation, also by the turtle, an important animal in that zone. On the plains of Rio Grande do Norte cattle are raised in large herds. Sugar-cane, cotton, tobacco, rice, coffee and all the other equatorial products are cultivated for local use and readily exchanged by means of water communication.

In the second zone the coast is low and sandy, but the interior is phenomenally fertile, and cocoa, coffee, sugar-cane, rice, cotton, cocoa-nuts, manioc and maniçoba, which makes an excellent rubber, are cultivated there. The forests yield gutta percha, building and cabinet woods and carnauba.

On the coast are extensive salterns, easily worked on account of the high temperature of the water, causing evaporation in a few hours. There are extensive grazing lands, where cattle and goat raising is carried on. The facilities for communication are abundant, namely, by the sea, many navigable rivers and some railroad lines.

Fifteenth of November Square, Rio de Janeiro.

Town of Santo Amaro, Bahia.

The land in the interior of the third zone is entirely formed by large plateau fields, with strips of woods and shrubbery. This zone is adapted to all kinds of tropical culture, and also in the higher part to temperate culture. On the fine grazing lands large herds of cattle are easily raised without shelter.

In all this vast zone there is not a piece of inhospitable, sandy or arid ground; it is all washed by rivers, some of which are navigable. The entire zone is fertile and produces cereals, sugar-cane, manioc, coffee and all kinds of tropical and temperate zone fruits.

The natural product, which constitutes the actual wealth of the country, is cattle. The majority of the rivers are navigable for small vessels. There is a railroad extending from the coast to the interior of the State of Goyaz.

The next zone is the northeast central, productive center of sugar, cotton, tobacco and cocoa—a fertile land, well populated and washed by many navigable rivers. The natural products of this zone are timber and all other products of the forest, gutta percha, resins, rubber (mangabeira), piassaba, fibrous and tinctorial plants, mineral products, calcarius, saltpetre and alkaline phosphates.

Sugar-cane for manufacturing sugar, alcohol and rum, cotton, tobacco, cocoa, cocoa-nuts, cereals, manioc and fruits, such as oranges, mangoes, abacaxis, bananas, etc., are cultivated on a large scale. There is easy and convenient communication by means of many railroads to large sea-ports.

Next to this zone, comes the coffee producing zone, in which is cultivated more than three-fourths of all the coffee produced in the world. Here are found the celebrated terras roxas, whose fertility is second to none in the world. Besides this culture there are large fields of cereals, and cattle and hog raising is extensively carried on. This part of Brazil yields readily all kinds of tropical culture, where there are forests; while on the high plateaus, the products of temperate zones are found, for instance, European fruits, vineyards, etc. Next to coffee, corn, beans, rice, sugar-cane, manioc and tobacco are cultivated.

The Minas Geraes zone, central and northwest, and the eastern part of Goyaz is the most important mineral zone of the country, being also suitable for all tropical and temperate culture and for dairying.

The Matto Grosso zone—Paraguay River low land, which may be considered as a continuation of the Amazon valley, resembles it in its different productions. The characteristic plant of the entire Paraguay valley is matte, a forest product, which furnishes the special industry of the zone. This zone is also suited to all tropical productions and to cattle raising. The shipping facilities of the large navigable rivers are excellent. The south oriental zone, mountainous zone of the south, is noted for its pine forests, which furnish good timber for cabinet work and building purposes. The many foreign colonies established there, taking advantage of the climate, elevation and latitude of the zone, have introduced the cultivation of all plants of southern and central Europe, such as grape-vines, wheat, barley and oats, as well as the linen and silk industries.

North Pond, Bello Horisonte.

STATE OF BAHIA MEDICAL SCHOOL.

1—Medical Chemistry Laboratory. 2—Reading Room. 3—A Group of Professors. 4—Medical Natural History Laborat
5—Bacteriologic Laboratory. 6—Histologic Laboratory.

Luz Station, Jundiahy end.

The matte industry is largely carried on in the State of Paraná and Rio Grande do Sul. The land is exceedingly fertile, the climate has no equal and the communication facilities are adequate, both by rail and sea. It is in this zone that large layers of coal are just beginning to be exploited. The principal products are wheat, corn, rice, beans, European fruits, wine, dairy products, salt meats, fibres and wood.

The last zone is that in which the cattle raising industry is mostly developed, on account of the excellence of the natural grazing lands and facility for transporting the products.

These lands, covered with cattle, horses and mules, supply almost all the other states of the Republic. In the State of Rio Grande do Sul there are also large sheep, goat and hog raising industries.

AGRICULTURE—Coffee is the agricultural product most extensively cultivated and the principal source of wealth in Brazil. It represents almost half of the entire value of exportation. This plant is especially cultivated in the States of São Paulo, Minas Geraes, Rio de Janeiro and Espirito Santo and on a smaller scale in Bahia and Ceará, and the soil particularly adapted to this cultivation covers an area of more than 255,000 square miles. On account of the existing favorable climatic conditions and the adaptability of the soil, the cultivation of coffee thus becomes an easy and profitable business.

National Museum, Rio de Janeiro.

Newly improved machines which have been introduced for planting, harvesting and preparing this product have made the Brazilian coffee, on account of its superior quality, the finest and best on all markets.

The world's production of coffee from 1901 to 1902 was 19,588,000 sacks of 132 pounds each, of which Brazil furnished 16,246,000 sacks, and all the other coffee producing countries 3,342,000 sacks.

The exportation of this product went to 142 ports of different nations, New York heading the list with 4,563,047 sacks, New Orleans took 718,309 sacks and Baltimore 274,697 sacks. The most important Brazilian shipping ports for this product are Santos, with 10,000,000 sacks, Rio de Janeiro, 5,496,000 sacks and Bahia and Victoria 750,000 sacks.

The exportation of coffee from all other countries during the same period was as follows: Columbia and Central America 1,150,000 sacks, Venezuela 800,000 sacks, Java 450,000 sacks and Hayti 425,000 sacks. Other countries 517,000 sacks. These figures, taken from the best statistics, prove that much coffee is sold in America

City of Bahia

Entrance of Iracema Farm.

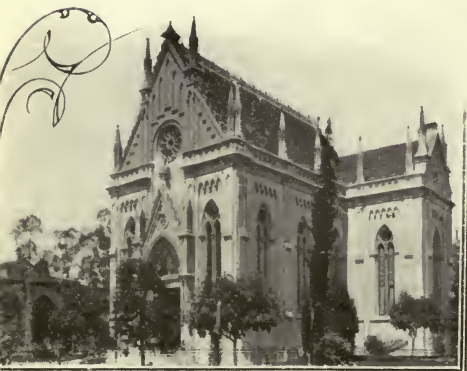
and Europe as Mocha and Java, but comes in reality from Brazil. The proof that the best coffee in the world comes from Brazil lies in the fact that this product has been awarded the gold medal at different International Expositions in competition with products of other countries.

The total exportation of the country in 1901 amounted to 14,759,845 sacks and in 1902 to 13,057,383 sacks. The economic conditions of the coffee production have changed during the last few years on account of the continued lowering of prices, the origin of which can be traced to the great increase of this culture and the consequent over production; but even at the rate of 5 cents per pound at the shipping port, this culture is a paying one.

The following figures are taken from a book by Mr. M. Lamberg, who traveled through Brazil: A coffee farm, Terra Roxa, of first class quality, free from frost, of 100,000 trees, is valued at $50,000. 1,000 trees planted on such a farm will produce ordinarily 6,400 lbs. but never less than 4,800 lbs. 100,000 trees then, yielding 4,800 lbs. per 1,000 trees, produce 480,000 lbs. which, at the rate of 5 cents per lb., will net $24,000.

Boa Viagem Shore.

The expenses of such a farm can be estimated at $12,000, leaving a profit of $12,000 or 24% on the capital.

Other products may be raised and small industries can be conducted on the same farm, by which method, if circumstances are favorable, the profit will be increased and the capital often doubled.

Church of the Mercy Hospital.

SUGAR-CANE—Next to coffee, sugar-cane is the most important agricultural product of the country. This plant is cultivated in all the states of Brazil, constituting the special agricultural production of the northern states, namely, Alagoas, Pernambuco, Sergipe and Bahia, where the manufacture of sugar and alcohol is very important.

Municipal Palace, Porto Alegre.

The output of sugar throughout the country is more than 500,000 tons, very little of which is exported. This industry has now reached an important crisis, on account of the extensive production of beet-sugar and the inefficiency of process and machinery used, which only extract from this essentially sacchariferous plant 7 to 8% of sugar while in Germany, by the new process, from 13 to 14% of sugar is taken from the beet. In 1883 Brazil exported 330,000 tons of sugar and 350,000 gallons of rum; in 1886 only 200,000 tons of sugar and 125,000 gallons of rum. Since then the exportation of sugar has varied considerably but is always diminishing, so that the actual exportation can be estimated at an annual average of 250,000 tons. The economic conditions of the sugar-cane industry are not so favorable, as they formerly were, on account of the depression in price but the results show, that it is still sufficiently remunerative for capital and labor.

In the aforementioned book of Mr. M. Lamberg the following figures are found: a farm of 1,000 tarefas (889 acres) of productive land will cost about $6,000 with house and implements. If the land be of first-class quality, the price will probably increase to $9,000. The financial figures of such a farm are as follows: on a farm of 1,000 tarefas 100 to 150 are usually planted in sugar-cane, 20 or a little more in corn, beans, etc., 150 in pastures and the remaining portion kept in timber. Taking the first figures, as the cost of the land, $6,000 and adding $3,800 for implements, wagons, cattle, horses, etc., the capital invested will amount to $9,800. The annual expense will average $8,250. One tarefa of good land planted with sugar-cane, if well cared for, will yield 562 gals. of syrup. The market price for this product varies from 15 cents to 22 cents per gal.

At the medium price of 18 1-2 cents, the production of 56,200 gals. of syrup, for the 100 tarefas, will amount to $10,397 or a clear profit of $2,147.

These figures are absolutely reliable; the estimates were all made on low prices and no one in Brazil would be satisfied with less. The estimate of the production per tarefa is also very low.

TOBACCO—Tobacco is another important agricultural product in Brazil. As sugar-cane, it is cultivated in all the states but the most extensive plantations are in Pará, Minas Geraes, Rio Grande do Sul, Goyaz and principally in Bahia, of which state it constitutes the principal export.

In 1872, the total exportation of tobacco amounted to 17,000 tons, of which the State of Bahia alone exported 14,000 tons. Until 1892 all the tobacco was shipped in leaves to Europe, and returned manufactured in cigars and cigarettes. From 1892, until the present time, the increase of the import-tax has greatly benefited the cigar industry in the country. In Bahia and Rio Grande do Sul large cigar factories export their products, equaling those of Havana. In Minas Geraes and

Quarantine Hospital, S. Paulo.

Therezopolis Range of Mountains.

Rio de Janeiro there are also large cigar factories. In 1901, the tobacco exported from Brazil amounted to 33,471 tons, and in 1902, to 45,200 tons.

COTTON—Next to tobacco, cotton is an important culture of the country. In 1870, the exportation of this product was valued at $12,000,-000. In 1871 and 1872 it went higher, reaching a value of $44,000,000. During the crisis, which this product suffered in foreign countries some years ago, Brazil took fourth place in the exportation of cotton, next to British-India, the United States and Egypt.

Any of the states north of São Paulo are adapted to this culture but it is only cultivated on a large scale in the seacoast states, between Bahia and Maranhão. From 1883 to 1887 the exportation increased to 30,000 tons per year, always commanding good prices in foreign markets. On account of the great development in cotton manufacturing industries, the larger part of the production is consumed in the country. In 1901 the exportation of cotton amounted to 11,764 tons and to 32,137 tons in 1902.

CEREALS AND POTATOES—All the cereals yield rich return in Brazil. Rice, produced in the damp plains and valleys of São Paulo, Minas Geraes, Rio de Janeiro, Santa Catharina, Rio Grande do Sul and Maranhão, grows in long stems, 3 1-2 ft. high, with a production of from 50 to 60 times the seed used.

The Maranhão rice is much finer than that of Indo-China and the Carolinas. In Campinas (São Paulo) the American white rice, in the graniferous period, reaches a height of 4 ft.; the black variety, cultivated in Pindamonhagaba, in the same state grows sometimes as high as 5 ft. The production in this state averages from 70 to 75 bushels per acre. In Santa Catharina, Paraná and Rio Grande do Sul rice mills take care of the rice cultivated in these states. The production of this important food is so small in comparison with the consumption of the country, that the yearly importation amounts to many million pounds.

WHEAT—The production of wheat is still small, notwithstanding the fact that all the states south of the tropics and the high lands of some northern states are all suitable for its production. The State of Rio Grande do Sul cultivated wheat so extensively in past years, that it furnished this product to almost all the northern states of Brazil.

The average temperature of Rio Grande do Sul is from 59 to 62 degrees Fahrenheit in the southern part and from 55 to 57 degrees in the mountainous region of the north, susceptible, therefore, of the varied cultures of Portugal, Italy and Southern France. In Florianopolis there is an average temperature of 60 degrees, a little less than at Gibraltar; and in the high lands of Santa Catharina, which are isothermic with Montevidéo, there could be grown all the species cultivated in France and Northern Italy.

Military School, Botafogo.

Paulistana Cotton Mill.

Similar conditions prevail in the States of Paraná, São Paulo and Minas Geraes. The most favorable temperature and climatic conditions for the cultivation of wheat exist in the following places: on the entire plateau of the Mantiquera Range, where the temperature is from 37 to 40 degrees, in the Orgãos Range, with an average temperature of 64 degrees, in the Cantagallo and Nova Friburgo plateaus, where it is not over 65 degrees and even in the States of Sergipe, Espirito Santo, Bahia, Pernambuco and Ceará.

CORN—Corn is cultivated on a little larger scale but the production is not yet sufficient for the consumption of the country and it is therefore necessary to import this product extensively. Beans and potatoes are on a par with corn and are imported when they could form a valuable product of exportation, the soil possessing exceptional qualities for the cultivation of these plants.

COCOA, GRAPE-WINE, FRUITS, ETC.—Cocoa is produced abundantly in many states of Brazil, as in Bahia, Pará, Maranhão and Espirito Santo. In 1901 the exportation of this product amounted to 15,682 tons, and to 20,642 tons in 1902. The greater part of this production is used by the national factories.

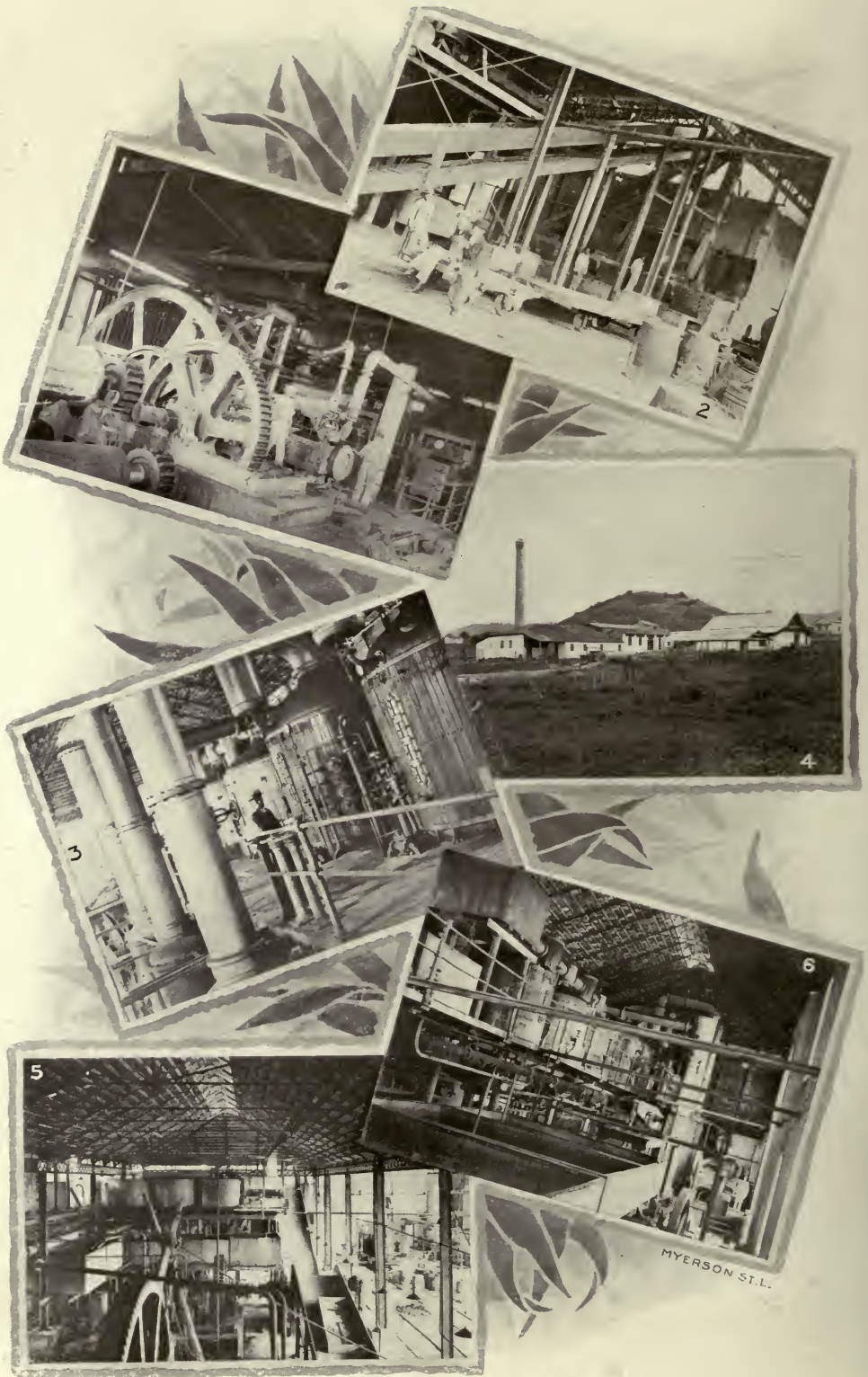
The cultivation of vanilla, indigo, piassaba, aramina and other textile fibres is carried on to some extent but is not as important as that of cocoa. Vanilla is a native plant, found in the forests of Pará, Amazonas and Matto Grosso.

Indigo, from which ANIL-AZUL was very renowned, was some time ago, extensively cultivated in Brazil, namely in the State of Ceará; aramina is being carefully cultivated in the State of São Paulo, where its fibre is used for the manufacture of bags, taking the place of jute hemp, and with better results.

GRAPE CULTURE—The grape culture has begun to show magnificent results in the southern states of the Republic, where the best wines in the country are made. The production of wine is yet in its infancy, not preventing importation on a large scale, nor that of fresh and dried grapes.

Fruit is generally cultivated in small quantities. The country produces all the exotic, as well as an immense variety of native fruits almost all savory in taste. In the southern states and higher portions of Rio de Janeiro and Minas Geraes apples, pears, peaches, cherries, plums, strawberries, melons and all the European fruits, abundantly produced, are profitably cultivated.

EXTRACTIVE INDUSTRIES—There are known to be many large and natural deposits of rock salt in Brazil, in the States of Matto Grosso, Goyaz, Paraná, Bahia, Piauhy and Minas Geraes, which are frequently mixed with clay or marl, forming large loam pits of salted argill, in dry weather

Bom Fim Church, City of Bahia.

SUGAR FACTORIES, INTERIOR VIEWS.

Rio Grandense Lyceum.

being covered with efflorescence. The exploitation of this salt is very small and in a rudimentary condition. Since the colonial epoch the chloride of sodium industry has been carried on, on the seacoast.

The working of salterns is favorably carried on from Cabo Frio, near Rio de Janeiro, north as far as Piauhy. The seacoast of the States of Rio Grande do Norte and Ceará could furnish enough salt for the entire country and over, giving thus an additional article of export.

From 1865-66 the vast salterns of Rio Grande do Norte produced only 5,327 tons of salt; but in 1893 a great impetus was given to this exploitation, resulting in a yearly output of 112,000 tons. The total production of salt in Brazil amounts now to 240,000 tons per year, equal to that of Italy; but this quantity is not yet enough to supply the demands of the country, for the reason, that in some salterns the old process is still in use, producing a salt unfit for meat salting. In Rio Grande do Sul, where there are slaughter-houses, they prefer to import Cadiz salt. Brazil imports refined salt from Great Britain, although that industry has just been started in Rio de Janeiro.

RUBBER—The SYMPHONIA ELASTICA gum is the source of the great wealth of the Amazon. Almost all the affluents of this immense river flow through forests, in which these trees abound. In all the native forests of the Madeira, Purús, Acre, Uaco, Javary and Juruá Rivers this product is extracted on a very large scale, constituting a very valuable commerce. The immense forests of northern Matto Grosso, in the valley of the Guaporé, have not yet been explored. A few years ago they began to extract Maniçoba and Mangabeira, two native species of the States of Ceará and Bahia. The exportation of SYMPHONIA ELASTICA rubber from the ports of Belem and Manáos, in 1901, amounted to 29,147 tons and in 1902 to 27,113 tons, and

	Manicoba	Mangabeira
In 1901	472 tons	809 tons
In 1902	801 "	574 "

The total production of rubber in Brazil, in 1902, was valued at $36,919,000 and the importation of rubber manufactured products, at $518,000. These figures show the amount of business that could be done by factories established in the country thus reducing the price of goods by saving the expense of duty and freight.

MATTE AND WOODS—In the States of Paraná, Matto Grosso, Santa Catharina and Rio Grande do Sul there are large forests of the tree that produces matte, an excellent drink, rivaling coffee and tea. Picked from the tree in leaves and small stems, matte is prepared in special factories and exported in large quantities. The exportation from the above states in 1902, amounted to 4,970 tons.

Brazil is immensely rich in all kinds of woods for building, naval construction and cabinet work. All the states have a large variety and the exportation thereof would be very extensive if the work were systematically conducted. The exportation until the present time has been insignificant, taking into consideration the abundance of the woods and the

Interior of Luz Station, São Paulo Railway.

Luz Station, São Paulo Railway.

facilities of exploitation. In 1901, this exportation amounted to 3,279 tons, and in 1902, to 2,949 tons only.

PASTORAL INDUSTRIES—Brazil offers the most favorable conditions and unequalled facililties for the successful development of the pastoral industries. All the grazing lands of Rio Grande do Sul, Paraná, Minas Geraes, Goyaz, Matto Grosso, Piauhý, Rio de Janeiro, São Paulo and those of the Marjó Island are the best in South America, on account of the mildness of the climate and the fattening qualities of their pastures. In the most northern part of Brazil the whole Rio Branco valley is covered with grazing lands of first-class quality.

Until a few years ago, almost all the cattle raised in the country were from the Alentejan breed, brought by the Portuguese during the colonial epoch; but lately, many farmers, recognizing the advantage of breeding improvement, imported new breeds of Hereford, Durham, Shorthorn and Dutch cattle; Southdown, Leicester and Rambouillet sheep, for the States of Rio Grande do Sul, Minas Geraes, and Rio de Janeiro. The fields are all of the best quality of natural pasture of the graminea and leguminosa species; the jaraguá of the genus Panacium is a graminea, which, in its chemical composition, rivals alfalfa. It can be sowed in any kind of ground, while the same cannot be said of alfalfa.

The guinea (Panicum auriculatum) is as good as jaraguá in its quick growth and endurance of the climatic conditions of both summer and winter; it is as rich as the latter in nitrates and even richer in carbon hydrates.

The two kinds of pasture predominating in the fields are Pamapuan and Mimosa of different varieties, Capim Branco, Gordura and Mellado.

The country has about 30,000,000 head of cattle. They are raised only in four states for exportation, namely, Rio Grande do Sul, Minas Geraes, Goyaz and Matto Grosso, all the other states raising enough cattle for local use only. In Matto Grosso the stock is estimated at 3,000,000 head, the exportation

Icarahý Shore, Rio de Janeiro.

thereof being from 180 to 200,000 yearly. All the cattle from Goyaz and Minas Geraes are sent to Rio de Janeiro. This last state, which exports 180,000 head of cattle, has 4,000 raising and fattening farms. From Rio Grande do Sul, only a small percentage of livestock is exported, almost all the cattle being used for salt dried meat. Some important establishments, called XARQUEADA, carry on this industry, slaughtering about 600,000 head of cattle yearly.

Viaduct on São Paulo Railway.

Sheep breeding is not extensive and is yet confined to the States of Rio Grande do Sul, Minas Geraes and Rio de Janeiro. The wool production in the first named state, in 1903, amounted to 2,500,000 lbs. and 75,000 lbs. in the last.

The output of the pork production in the States of Rio Grande do Sul, Paraná, Santa Catharina, Rio de Janeiro and Minas Geraes is of greater importance; the last state, which is the largest producer, raises a special breed of the finest quality, that has already adapted itself to the climate and food used in the country.

Horse and mule raising is carried on in the States of Rio Grande do Sul, Minas Geraes, São Paulo and Paraná. The breeds have been improved with care and there are some perfectly suited to the country. The Brazilian horse is fine in form, fleet, active, and possesses great power of endurance, qualities which make it a worthy rival of the best breeds known.

Goat raising is carried on in the northern states of Bahia, Pernambuco, Piauhý, Rio Grande do Norte and Ceará, from which places the exportation of hides is made on a large scale.

INDUSTRIES DERIVED FROM PASTORAL PRODUCTS—There are some tan yards in the country, but the tanning industry is not sufficiently developed and offers profitable investment for capital, if conducted on a large scale. The country has all the facilities to produce a large quantity of hides, of varied qualities; it possesses also, the first grade of tanning barks, such as the Sarandahy, Cajuerio and Angico. The national tan yards do not progress, however, and tanned hides are still extensively imported. The principal reason of this is the lack of sufficient capital to keep a large stock of hides on hand, in order to give the tanning bark all the time required to accomplish its work with perfection.

From 1882-87 Brazil exported more than 58,000 tons of raw hides, while from 1886-87 there was imported more than $3,300,000 worth of leather and leather goods. In 1901 the importation of

Portland Cement Factory.

Coxipó Bridge, Matto-Grosso.

different kinds of leather amounted to 500 tons. The above figures show the opportunity of enlarging an industry, that would net large returns for invested capital.

Until 1886, dairy products were found in a very small quantity, on the market. In the southern states, some cattle raisers in Minas Geraes and a few colonists, established in Petropolis and Fribourg, manufactured these products, but for local use only and to sell at the Federal Capital.

The import tax of 30% was low and encouraged importation. From 1886-87, by the port of Rio de Janeiro alone, the country received almost 1,000 tons of dairy products, valued at $560,000, while the whole importation of the country was not less than 3,000 tons representing a value of $1,700,000.

The increase, of the import tax since this last year, permitted the establishment of some factories. In the State of Minas Geraes alone, there are now 53 factories, whose products increase yearly. This production, in 1899, amounted to 85 tons, in 1900 to 150 tons and in 1902 to 300 tons. At the present time the yearly butter production in the country can be estimated at 700 tons, which is yet insufficient to supply the demand.

Cheese manufacturing is less important than the preceding, although in the same states, where butter is produced, cheese is also manufactured to a certain extent. In the city of Petropolis, small quantities of cheese, as good as that imported from France, is made.

In Minas Geraes, a special kind of cheese is made which is very much sought after in the markets, but on account of the large amount of water it contains, it can not be exported and ought to be used fresh. The production in that state amounted to 3,159 tons in 1887, 3,268 tons in 1889 and 3,311 tons in 1900.

The ham production is very small; almost all that is used being imported into the country.

The lard industry is progressing. Rio Grande do Sul, Santa Catharina, Paraná and Minas Geraes furnish lard for the local market, also some for the other states, thus causing a decrease in the importation of the product.

From 1886-1887, the port of Rio de Janeiro alone, imported more than 1,000 tons of lard and 1,200 of ham and other pork products.

In 1902, the importation for the whole country amounted to 4,206 tons of lard and 295 tons of other pork products.

Brazil is not an industrial country as yet but it possesses all those natural resources, which, if developed, would place it among the first in the world in a very few years. Industries can be carried on by individuals or companies, who are permitted to enjoy every liberty, the only restriction being those with regard to the morals, safety and health of the public in general.

The laws of the country insure equal rights to all, although exceptionally some temporary privileges are

Rio Grande do Norte Harbor.

granted in favor of some new invention, process or industry.

The National Congress awards premiums for the breeding and raising of fine cattle and for the development of any new industry. When it becomes necessary the tariff protects home products.

Commercial Bank and Provincial Bank, Porto Alegre.

Manufacturing industries have already shown rapid progress during the past few years. Great numbers of industrial companies have been established all over the country and they have shown yearly progress.

BEER—Until 1885, the production of beer in Brazil was confined to an inferior grade, obtained by the fermentation of barley with the aid of sugar, all higher grades of this product being imported. The increase in the import-tax, established by law in that year, gave rise to the installation of new factories, using the refrigerating process, which at the present time, produce beer of the best quality, rivaling those imported.

The breweries of Rio de Janeiro and S. Paulo have a producing capacity of 440,000 gals. But they scarcely ever exceed half that quantity. There is no more foreign beer on the market, with the exception of a small quantity imported from England, labeled Guinness.

The importation of barley in 1902 amounted to 127 tons and that of malt to 4,521 tons.

BISCUITS—The biscuit industry in Brazil controls the home market and very little is now imported. Rio de Janeiro has 17 biscuit factories; the city of S. Paulo 25 and the State of S. Paulo more than 200. In Secchi's factory, the daily production exceeds 3 tons, the factory covering an area of 25,000 sq. ft. This industry is in a very prosperous condition in Rio Grande do Sul, Pernambuco and some other states.

CANNED GOODS—In the States of Rio Grande do Sul, S. Catharina, São Paulo and Rio de Janeiro, this industry is very much advanced and the products are of the finest quality. This industry is carried on in almost all the states.

VINEGAR AND ALCOHOLIC LIQUIDS—In the States of Rio de Janeiro, São Paulo, Bahia and Pernambuco vinegar is made by the oxidation of alcohol, this article being no longer imported. A national product of the finest quality supplies the market.

Alcohol and rum, both manufactured of sugar-cane, are better than similar foreign products, which are no longer imported. In the line of liquors and cordials, the Brazilian products are of the highest grade and could command a large export trade, if made in greater quantities. Flavors, taken from Brazilian fruits and crystallized cane sugar, the best for the production of these articles, are used.

COTTON MATERIALS—Until 1896, all the Brazilian cotton mills in São Paulo, Minas Geraes and Rio de Janeiro, manufactured a low grade of cheap goods for the confection of bags and very little attempt was made to produce muslin.

As long as Brazil was an Empire, the cotton cultivated in the country was exported raw, and all the cotton goods imported from the manufacturing countries. From 1882-87 the exportation of raw cotton amounted to 129,000

Corcovado Mountain. View taken from Nichtheroy.

STATE OF MINAS GERAES, PRESIDENT'S PALACE—BELLO HORISONTE.

1—Reception Hall. 2—Exterior View of Palace.

tons, valued at $30,000,000, making an annual average of $6,000,000. In one single year, 1886-87, the port of Rio de Janeiro alone imported $5,000,000 worth of manufactured cotton goods, showing that one single port of Brazil imported in that year cotton goods amounting to almost the same value as that of all the raw cotton exported by the entire country. This state of affairs was entirely changed by the tariff law of 1896. Brazil has now a great number of cotton-mills, provided with all the improvements of modern industry, where all kinds of material from the cheapest to the highest quoted in the market, are manufactured.

View of top of Serra Range.

The importation of these goods has been yearly restricted, the national factories now almost entirely owning the market.

WOOLEN MATERIALS—This industry is just in its infancy. For a long time there was only one factory in the country, namely in the State of Rio Grande do Sul, which limited itself to the production of woolen blankets.

Some years after, two more large factories were established in the same state, also one in Rio de Janeiro. There are now some new factories in São Paulo, all of which are progressively working, manufacturing cloth for army and navy uniforms, some cashmeres and flannels, being in no way inferior to those imported. The factories: Union Fabril, Porto Alegrense, in the State of Rio Grande do Sul and the New Rink factory in Rio de Janeiro have the most complete installations for the manufacturing of all kinds of woolen goods of the finest quality.

The increasing value of this industry can readily be seen by the fact that, in the year 1886-87, the port of Rio de Janeiro alone imported about $4,400,000 worth of manufactured woolen goods, the total importation of the entire country being about $9,000,000; while in 1902 the importation by the same port amounted to $900,000 only, and of this amount $700,000 was for yarn to be woven in the home factories.

LINEN MATERIAL—Flax is not cultivated in Brazil, but there are large regions of the country where the conditions are favorable to the growth of this plant.

Linen weaving is carried on by some foreign colonies only in the States of Rio Grande do Sul, Paraná and Santa Catharina, on a very small scale, and usually for their own use. This new industry, established two years ago, is now being tried in a factory in Rio de Janeiro, all the thread used, however, being imported. In 1902 the importation of raw linen amounted to $198,000.

JUTE AND HEMP MATERIAL—This industry has an exceptional importance in the country, on account of the large

nce of one of the Officers of the "Arethuzina" Cotton Mill.

State Government Palace, Curytiba.

exportation of coffee, which is all shipped in bags made of this material. While Brazil was an Empire, on acccount of the low import tax on them, almost all the goods used in making bags were imported. The tax was $50 per ton. Since this tax was raised to $162 per ton, Brazil has 15 factories of 2,330 looms, having a producing capacity of 68,000,000 yds. per year, or 43,000,000 bags. Some of these factories are still importing the thread they use, this importation amounting to 14,747 tons in 1902, and valued at $2,000,000.

Notwithstanding the large production of the country, hemp materials are still imported. In 1902 this importation amounted to 362 tons, worth $133,500.

Aramina is a new kind of fibrous plant cultivated in Brazil. This industry is growing rapidly in the State of São Paulo. The plant's exceptional quality makes it the best fibre for the manufacture of bags, ropes, cords, rugs, etc.

SILK—The raising of the silkworm is a future industry in Brazil. The Bombyx Mori becomes easily acclimated in all the southern states, in the Italian colonies of Rio Grande do Sul, São Paulo, Santa Catharina and Paraná. This industry is progressing, not on a large scale, but in many little spinning and weaving factories. In Minas Geraes this industry has been tried with the best results, and the Government of this State and that of São Paulo endeavor, with every effort, to encourage its improvement, offering premiums of $1,250 to $5,000 for the silk culture presenting the best results.

There are many silk, ribbon and lace mills, but they all work with imported thread. In the southern states, can be found some silk cords, tassels, silk trimmings, etc., made by some silkworm raisers in their own homes.

The importation of silk for the trade, mixed or otherwise, used for embroidery, etc., amounted to $400,000 in 1902, and that of manufactured silk goods was valued at $2,100,000, of which $575,000 was for ribbons, $793,500 for materials and $729,000 for silk thread and other products.

GLASS, CERAMICS, PAPER, ETC.—Glass manufacturing is carried on in the cities of Rio de Janeiro, São Paulo and Porto Alegre, where goods of inferior quality only are manufactured, on account of the lack of capital. In São Paulo there is one factory only, which produces glass of the finest quality, crystal and cut-glass.

The ceramic industry had almost fallen into desuetude, when in 1895 an increase in the duties from 1-2 cent to 2 1-2 cents per lb. on imported products permitted it to progress rapidly, and 5 factories were established, with a total capital of $1,250,000. Three of these factories are located in the State of São Paulo, one in Rio Grande do Sul and one in Minas Geraes (Caeté), all producing first-class material. Argill and kaolin deposits of excellent quality are abundant in all the states, so that this industry has in it the possibilities for continued prosperity.

In 1887 there was not one paper factory in the entire country, but immediately after Brazil became a Republic, there were three established in São Paulo, two in Rio Grande do Sul and one in Mendes, State of Rio de Janeiro.

The production of these factories has not been in very large quantities. One of the factories of Rio Grande do Sul, established in Porto Alegre, is producing common paper in sufficient quantities to supply

Bankhead View, S. Paulo Ry.

the States of Río Grande do Sul, Santa Catharina and Paraná. The material used for this product is the native taquara or bamboo.

FURNITURE—This is one of the most advanced industries in the country and it will be a hard task for any other country to compete with the Brazilian product, on account of the beautiful variety of woods, specially adapted to this kind of work, growing there. One factory, established long years ago, made Río de Janeiro the popular center for this industry, enhancing and improving the artistic designs and stimulating the taste for national furniture. This movement spread over almost all the states, so that at the present time there are many factories in Río de Janeiro, Bahia, São Paulo, Paraná, Río Grande do Sul, etc., which produce, in adequate quantity, all kinds of furniture used in the country, reducing the actual importation of furniture to that only made of bent wood; and even this will, in a short time, be all manufactured in the country out of native woods of better quality than that of which those imported are made.

Many other industries are progressing in the Republic, some of which have already stopped the importation of products from similar foreign industries, as for example: matches, candles, shoes, pharmaceutical products, hats, playing-cards, perfumery, etc. The tariff law of 1896, which increased the import tax, caused this industrial development and encouraged the investment of capital in many industries.

COMMERCE—Ever since 1808 the Brazilian Government has opened, to the free trade of the world, all her ports on her 6,200 miles of coast-line and of all of her navigable rivers. The Government has given to the trade very important and special privileges, has regulated all transactions with equal justice and gives protection whenever it is necessary.

The progressive growth of the income from custom duties during the last few years certainly shows the improvement of commercial interchange between Brazil and other nations. A little more than twenty years ago, from 1880-81, the general direct trade of Brazil was valued at $100,000,000, of which, $45,000,000 represented the importation and $55,000,000 the exportation. In 1888, the last year of the Empire, the direct, inter-state and foreign trade reached the sum of $153,000,000. At this time the foreign shipping trade was valued at $111,238,000—$52,559,000 being for exportation and $58,679,000 for importation.

In 1890 the general direct commerce increased to $131,358,000 of which $71,510,000 was for exportation and $59,848,000 for importation.

In 1891 this importation increased extraordinarily, almost double, to $113,000,000; but even in this year it was not higher than the exportation, which during the same period increased to $121,750,000. The following figures show that in three years Brazil's exportation was more than doubled: $52,559,000 in 1888 and $121,750,000 in 1891.

Always on the increase, the exportation in 1897 amounted to $280,892,000 and the importation to $140,000,000.

The decrease in the price of coffee, which has prevailed during the last few years, caused as a consequence, a reduction in these figures, but even during this period the exportation has always been higher than the importation.

In 1901, the exportation amounted to $250,207,000 and the importation to $103,605,000; in 1902, the former to $183,984,000 and the latter to $122,741,000.

Bamboo Allée, Rio de Janeiro, Museum Garden.

The larger part of this extensive commerce goes via the port of Rio de Janeiro, which is the market for three states: Rio de Janeiro, Minas Geraes and São Paulo.

Notwithstanding its incontestable importance, the city of Rio de Janeiro has not a commercial wharf in accordance with the necessities and demands of such complex work as that of a first-class port.

This improvement was under consideration many times, but only little work was accomplished, decidedly inadequate to meet the exigencies of and quite disproportionate to the commercial movement.

The construction of a modern wharf in the Capital of the Republic was not only a commercial necessity but an indispensable work for the improvement of the sanitary conditions of the city. All the professional authorities, having studied this matter, stated, that the construction of a quay along the littoral of the city was of the first and greatest importance.

In his electoral platform the present President of the Republic, F. P. Rodriguez Alves, announced as an essential part of his program the improvement of the sanitary conditions of the city of Rio de Janeiro, and ever since the first days of his administration Major Lauro Müller, Secretary of Industry, has had this matter under consideration, endeavoring to make the execution of this work a reality.

To cover the extraordinary cost of this work, the National Congress created a special tax, varying to 2% in gold, on the value of the entire importation, so that the law passed for this work would not overburden the ordinary budget. All the work for this important improvement was contracted for by Walker & Co., including the construction of a wharf 10,600 feet long, large warehouses, and the installation of all apparatus necessary for the handling of cargo. The same contract provided for the construction of all railways to receive and discharge all merchandise from warehouses, and a channel alongside the wharf to have a depth of 28 feet at low water and to be 910 feet wide.

In connection with this improvement there is another one being made by the Federal Government, which is the construction of a large avenue 5,540 feet long and 100 feet wide, starting from the wharf and traversing the commercial part of the city, thus providing easy transit for all kinds of vehicles.

The Municipal Government, in conjunction with the General Government, is, at its own expense, contributing to the improvement of the city by widening and lengthening different streets and by constructing new ones, in order to have a complete system of avenues, affording easy transit through the densest part of the city.

The estimate of the entire construction to be made by the General Government amounts to $42,000,000. Taking as a basis of calculation the five years from 1898-1902, the tax of 2% in gold on the value of the entire importation will amount to $3,217,000, which sum is sufficient to guarantee all the obligations of the loan. On May 18, 1903, the General Government contracted in London a loan of £8,500,000. The work was commenced a few months later, is progressing rapidly and will be entirely completed in a short time.

Central Ry. Station of Rio de Janeiro.

RAILROADS—Since 1874, the Brazilian Government having carefully assisted in the improving and enlarging of the railroad system in the country, many companies were incorporated and different lines constructed, starting from the principal cities on the coast. Taking into consideration the hydrographic condition of Brazil, having an immense coast on the Atlantic provided with magnificent ports and many navigable rivers, flowing through the country from the interior to the sea, it can be said that, with its present systems of railways, the traffic of the country enjoys all necessary transportation facilities.

Residence in Tatuhy.

After inspecting a map of Brazil it is true it might seem that the railroad facilities are inadequate, but it only appears to be so on account of the vast territory, which the railways cover and because the population being more condensed on the sea coast, they are confined principally to that section, leaving out the interior of the country, which is only sparsely settled. Even in this part, however, transportation is not so difficult, on account of the large number of navigable rivers.

The distribution of population and the great amount of production were the principal factors which made the construction of railroads along the coast a necessity.

The section of the country in which railroading is most complete is a large zone of more than 350,000 square miles, comprising the States of Río de Janeiro, São Paulo, Minas Geraes and a part of Espirito Santo, where the population is more condensed and the products of great importance. This is one of the most mountainous parts of the country, and for that reason the construction of railroads was more difficult and expensive; but as it is the coffee-producing section, and as the natural ways of communication are very inadequate, every effort was directed toward the furthering of the construction of railroads, so that these regions can now be traversed in any direction, from one end to another, making a trip the length of which corresponds with one from Marseilles to Warsaw, or from Bordeaux to Vienna.

A look at the map will suffice to show that all the zones in the neighborhood of an important port are well supplied with more or less completed railway systems connecting the sea-port with the interior of the country.

These different systems are: The Río Grande do Sul; the Paraná, São Paulo, Río de Janeiro, Minas Geraes and Espirito Santo; the Bahia; the Alagoas, Pernambuco and Parahyba. Besides there are many other railroad lines not included in these four systems.

São Paulo Railway.

The Río Grande do Sul System, which is also a strategic railway, connects the Capital of the State and the sea-port of Río Grande with the southern frontier of the Republic. It comprises eight different railroads, with a length of 985 miles.

Pupils of Piracicaba School.

The Paraná, São Paulo, Rio de Janeiro, Minas Geraes and Espirito Santo System is the largest of the four; it crosses the country from the sea-port of Paranaguá to that of Victoria, being more fully developed in the States of Rio de Janeiro and São Paulo, where it extends to the sea-ports of the Federal Capital and Santos, and to many others of less importance. From the interior, it stretches its lines to the far western part of Minas Geraes and São Paulo, and passes on to Catalão, in the State of Goyaz. This system includes different branches, with a total length of 7,270 miles.

The third system extends from the sea-port of Bahia to the interior, centre and northern part of the same state, on towards the Alagoas and Pernambuco System; it reaches the boundary of Sergipe, near the Atlantic coast and Joaseiro, on the High São Francisco River, which forms the boundary of Pernambuco. The seven railroads belonging to this system have a total length of 700 miles.

On account of the great number of sea-ports in this State, the different railways, instead of forming one system and running to the Capital of the State, go each to a different port, thus shortening the distance for the shipment of goods.

The Alagoas, Pernambuco and Parahyba System extends from the port of Maceió in the State of Alagoas, to that of Parahyba, Capital of the State of the same name. The principal port to which it extends is Recife, Capital of Pernambucó. This system has twelve railroads and a total length of 688 miles.

Besides these systems, there are nine other railroads extending from the different ports on the coast to the interior plateau, having a total length of 730 miles. Many others are in course of construction or being planned.

Almost all the Brazilian railroads were constructed by concessions granted by the General Government or by those of the States—privilege of zone—some economic protection and in a few instances a guarantee of interest on a limited capital.

The General Government has constructed, and manages at its own expense, some railroads belonging to the Republic. In 1903 Brazil had a total length of 13,697 miles of railway.

EDUCATION—Brazil has her general EDUCATION organized with regard to its different branches: elementary, secondary, superior and technic professional.

The State Government and municipalities have entire charge of the elementary education, which at the Federal Capital is conducted at the expense of the Municipality.

Secondary education is maintained by the State Government also, but the General Government contributes to and supervises that of the Federal Capital, as well as having charge of all the higher education, throughout the entire Republic. Professional education is divided between the three Governments:—Municipal, State and General Governments.

Bankhead S. Paulo Ry.

In the Federal District primary education is given in schools of three categories: Kindergarten and First and Second Grade schools.

President's Palace, Rio de Janeiro.

The Kindergarten are establishments where children of both sexes, from 4 to 6 years of age, receive a common education in accordance with their physical and intellectual development. In these schools the first elementary instruction is given by special methods, comprising games for children, gradual physical exercises, manual training, principles of moral education, common knowledge of objects and exercises in language, the first elements of drawing, reading, writing and arithmetic.

The primary schools of the First Grade are divided into schools for girls and boys; both for children from 7-14 years old. Women teachers are obligatory in girls' schools and either men or women in those for boys.

In the primary school of the Second Grade the education comprehends: penmanship, Portuguese, French, elementary mathematics, geography and history, principally of Brazil, first elements of physics, chemistry and natural history, drawing, music, gymnastics and manual training.

This part of education is generally managed by the State Government, but the Union has one Institute of this kind at the Federal Capital, the curriculum and organization of which serve as a guide for similar schools of the entire Republic.

Besides the High Schools for military and naval candidates, the Federal Government conducts 6 more Institutes, namely: 2 Medical Schools — Rio de Janeiro and Bahia; 2 Law Schools—São Paulo and Recife; 1 of Engineering, Rio de Janeiro and 1 of Mining in Ouro Preto.

The Medical Schools have special courses for the study of pharmacy, obstetrics and dentistry.

There are many other schools for the study of the higher branches belonging to private parties or financially aided by appropriations from the State Government, which enjoy equal privileges with the official schools because they conform to all the demands of the General Code of superior education.

Belonging to the General Government, the majority being located at the Capital of the Republic, are the following establishments for intellectual culture: Bacteriologic Laboratory, National School of Fine Arts (painting, sculpture and architecture), Institutes for the Blind and Deaf-Mutes; schools of music, Serotherapic Institute, Botanical Garden, National Museum (natural history and archeology), Astronomic Observatory, National Library, one of the richest in original documents and cuts, having 260,000 volumes of printed matter, 280 manuscript documents, 140,000 cuts and one of the largest numismatic collections of 25,000 coins and medals, 2,500 printed geographical maps and 500 that are hand made.

IMMIGRATION—At present all the immigration that comes to Brazil is voluntary, showing a preference for the southern states, from Rio de Janeiro to Rio Grande do Sul. The immigrants are principally Italians, Germans, Portuguese, Spaniards and Poles.

Rich colonies have been founded in Brazil by immigrants, which have developed into large centres of population, among these being Petropolis, Nova Friburgo (State of Rio de Janeiro); Caehoeira da Leopoldina,

Dredge Working at Coxipo Gold Mine, State of Matto Grosso.

PRIVATE RESIDENCES IN BELLO HORISONTE, STATE OF MINAS GERAES.

St. Thereza and St. Isabel (State of Espirito Santo), Blumenau and Joinville (St. Catharina); St. Cruz, Conde d'Eu, D. Isabel, Caxias (Rio Grande do Sul).

The General Government gives no subvention to immigration companies, but it has a lodging house for voluntary immigrants who come to settle in the country. It gives them shelter and free transportation to any part of the country in which they prefer to live. There are at present more than 300,000 Brazilians of German parentage living in very prosperous colonies in the southern states.

Carlos Gomes Theatre.

In 1901 Brazil received 76,292 colonists, in 1902, 14,358 landed in the city of Rio de Janeiro and from 1855 to 1901 the total number of colonists recorded at different ports was 2,023,693.

All the Brazilian States have special laws facilitating the buying of lands and for the first year offer special inducements to settlers with their families. The National and Foreign Steamship Companies as well as the railroads give good transportation service. The latter have accomplished much in their already extensive operations, when the immense size of the country is taken into consideration. Every year hundreds of additional kilometres of railroads are being opened to public traffic. The operating railroads, the concessions given for the laying of new tracks, and for those being surveyed and planned by the Government, show that in a very short time the entire country will be covered by an extensive system of railway, offering every facility for the transportation of products from far interior points to the shipping ports and centres of population. The total number of miles of railroad in operation in 1903 was 13,697.

TELEGRAPH—The States of Brazil, their cities, towns and principal villages are connected by telegraph lines, which belong to the National Government. Brazil is also in communication with the different parts of the world by means of submarine cables.

The principal cities of the republic are lighted by electricity and have street-cars.

POPULATION—Although the last census was incorrectly made, it can be stated positively that the population of the country numbers now at least 20,000,000.

FINANCES—The official report of the Secretary of the Treasury for the fiscal year ending 1903, shows that the revenue of the Republic was:

Revenue in gold	Rs. 77,646,193$488
" in paper	Rs. 346,503,095$113
Expense in gold	Rs. 34,650,246$294
" in paper	Rs. 251,763,769$208

Leaving a balance for this fiscal year of:

Balance in gold	Rs. 42,995,947$194
" in paper	Rs. 94,739,325$905

This balance is not final, however, the report having been made before all the accounts were completed. During the past years severe measures have been taken to ascertain the exact receipts of the income tax and resolutions adopted to use the strictest economy in the expenditure of public monies. These measures have placed the country in an exceedingly prosperous condition. Brazilian bonds are quoted in the London market as first-class securities.

The products exported from the country during the nine months from January to September, 1902, amounted to, as follows:

EXPORTS:

Animals and their products	£ 1,365,343
Minerals and their products	633,188
Vegetables and their products	24,078,528
Total	£26,077,057
Metallic money and Fiduciary	£25,568

The above figures are given for products on board steamers at the points of export of the Republic.

CONSTITUTION—The Brazilian Constitution, which was framed on the most advanced and liberal principles, declares a federal republican form of government.

There is no official form of religion and although the greater part of the people are Apostolic Roman Catholics, all religions enjoy equal rights and entire liberty.

JUSTICE—Justice is guaranteed by courts of different instance, established by the organic law of the country. Education is liberally distributed all over the country, from the elementary to the highest grades, the best institutions belonging to the General Government, the states and the municipalities. For the army and navy the General Government has special schools that can be compared with the best in the world, where the candidates to the service and the young officers are familiarized with all the new methods of war.

Public order is guaranteed by the police; and for her self defense and integrity, Brazil maintains a permanent army and navy, with their reserves.

The Capital of the Republic is situated in the state of the same name, the Federal District covering an area of 1,892 square kilometres. The harbor of Rio de Janeiro, known also as Guanabara, perhaps the largest and most beautiful in the world, has a circumference of forty-five miles.

The Brazilian Capital is greatly favored by its peculiar topographical situation. It has been considered, without reason and rather with injustice, until a few years ago as unhealthy, on account of some cases of yellow fever, which, as a matter of fact, during only two months of the year ever attacks the inhabitants. Now this erroneous idea has been dispelled. By the improvements made in private and public hygiene, by the prophylactic measures taken in accordance with the best and most modern processes of sanitation, as a result of recent experiments, yellow fever has been entirely eradicated. The death-rate, taking into consideration the totality of diseases and density of the population, is at the minimum and shows that very few such populous centres as Rio de Janeiro enjoy as good hygienic conditions.

BRAZIL

GENERAL IMPORTS

IN 1902

MERCHANDISE	UNIT	QUANTITY	C. I. F. VALUE IN BRAZIL. By Article In Mil Réis Paper
CLASS I—Animals Living and Stuffed	Head	—	**5.096:677$**
Animals stuffed	"	—	2:504$
Birds and fowls, all kinds	"	—	9:270$
Asses, horses and mules	"	3.456	578:029$
Goats and sheep	"	31.016	352:681$
Swine	"	474	29:541$
Cattle	"	44.468	4.097:339$
Animals living, unenumerated	"	—	27:313$
CLASS II—Raw Material or Prepared for Use in Arts and Industries	Kilo	—	**89.192:565$**
COTTON RAW AND PREPARED	"	**3.628.096**	**8.960:440$**
Yarn	"	2.090.363	3.369:884$
Sewing thread	"	932.545	5.192:826$
Washed, combed and in wool or wadding	"	573.224	322:838$
Twisted or braided	"	31.964	74:8 2$
HAIR, FURS AND FEATHERS	"	—	**714:874$**
Horse hair	"	2.079	7:612$
Beaver, hare, rabbit or other furs	"	44.600	641:059$
Feathers all kinds	"	1.006	44:239$
All other unenumerated	"	—	21:964$
CANE, BAMBOO, RUSH, OSIER, ETC	"	—	**164:244$**
Cane and bamboo	"	3.254	2:838$
Rush, rattan and osier	"	104.037	161:349$
Others unenumerated	"	—	57$
LEAD, TIN, ZINC AND ALLOYS	"	**3.479.563**	**1.383:675$**
Lead, pig, ingot and sheet	"	2.926.125	771:200$
Tin, bar, rod, sheet and plate	"	143.406	394:569$
Zinc, sheet and plate	"	410.032	217:906$
COPPER AND ALLOYS	"	**813.740**	**1.168:153$**
Cast, moulded and filings, etc	"	813.740	1.168:153$
ANIMAL RESIDUES	"	—	**3.562:611$**
Whalebone, crude or prepared	"	7.043	46:626$
Wax, crude or prepared	"	13.645	22:625$
Glue and gelatine	"	82.003	173:841$
Spermaceti or stearine	"	44.561	41:461$
Guano and other manures	"	21.143	9:796$
Other animal oils for industrial purposes unenumerated	"	22.823	18:726$
Tallow and grease	"	4.812.495	3.168:790$
Unenumerated	"	—	80:746$
IRON AND STEEL	"	**18.639.688**	**3.536:023$**
Steel, bar and rod	"	1.942.871	618:190$
Iron, bar, rod and plain sheet	"	13.713.924	2.656:632$
Iron, pig, cast, puddled and filings	"	2.982.893	261:201$

MERCHANDISE	UNIT	QUANTITY	C. I. F. VALUE IN BRAZIL. By Article In Mil Réis Paper
Class II—Continued.			
JUTE AND HEMP	Kilo	**15.129.086**	**8.607:487$**
Yarn or prepared	"	14.747.044	8.363:991$
Waste or oakum	"	382.042	243:496$
WOOL	"	**518.822**	**1.843:046$**
Washed, carbonised, dyed and raw	"	195.303	486:613$
Yarn and wool for embroidery	"	315.300	1.332:009$
Waste (scrap)	"	8.219	24:424$
LINEN	"	**167.546**	**397:792$**
Crude or prepared	"	60.647	37:490$
Yarn and thread	"	106.899	360:302$
LUMBER AND TIMBER	"	—	**5.204:774$**
Staves and hoops	"	—	48:027$
Cork and bark	"	2.612	1:290$
Match sticks and boxes	"	1.869.989	683:005$
Wood pulp for manufacture of paper	"	87.288	16:304$
Pine	"	—	4.234:003$
Unenumerated	"	—	222:145$
SUBSTANCES FOR THE MANUFACTURE OF PERFUMERY, DYES, PAINTS, ETC	"	—	**5.580:962$**
White lead and zinc white	"	1.448.267	645:134$
Indigo and ultramarine blue	"	132.755	131:729$
Soda ash or potash	"	3.110.110	437:900$
Aniline and fuschine dyes	"	242.275	1.180:821$
Essences all kinds; oils, fixed, liquid or concrete, pyrogeneous, volatile and essential	"	2.997.466	2.249:101$
Lamp black and other dry unenumerated paints	"	1.195.951	446:203$
Red lead or minium	"	430.297	147:978$
Unenumerated	"	—	342:096$
OTHER METALLOIDS AND METALS	"	—	**323:072$**
Aluminum, bar, sheet and wire	"	893	7:277$
Antimony, arsenic and bismuth	"	57.674	30:127$
Sulphur	"	1.030.822	161:242$
Mercury or quicksilver	"	6.475	38:867$
Nickel in cubes and sheet	"	1.121	5:035$
Unenumerated	"	—	80:524$
GOLD, SILVER AND PLATINUM	"	130⁶⁴⁰	**65:194$**
Gold, bar, dust and scrap	"	0³⁶³	1:303$
Gold leaf for gilding and dentistry	"	102⁰⁶⁵	50:605$
Platinum, bar, sheet and wire	"	5⁰⁶⁵	11:188$
Silver in bars	"	0⁰⁵²	6$
Silver leaf for plating and dentistry	"	23⁰⁹⁵	2:092$

MERCHANDISE	UNIT	QUANTITY	C. I. F. VALUE IN BRAZIL. By Article In Mil Réis Paper
Class II—Continued.			
STRAW, BROOM GRASS, COCOA FIBRE, PITA, PIASSAVA, PAINA AND OTHER FIBROUS MATERIALS	Kilo	—	**434:706$**
Paina (vegetable wool or silk) all kinds........	"	—	—
Corn leaves for cigarettes....................	"	26.220	172:326$
Mat and hat straw..........................	"	44.807	80:331$
Straw fibre................................	"	4.669	3:136$
Broom straw................................	"	413.074	146:699$
Excelsior (*zostera marina*)..................	"	11.516	3:069$
Unenumerated...............................	"	—	29:145$
PLANTS, LEAVES, FLOWERS, FRUIT, BERRIES, SEEDS, ROOTS, BARKS, ETC................	"	—	**3.013:043$**
Malt..	"	4.521.729	1.707:072$
Leaves, flowers, herbs, stems, hops, roots, barks, medicinal or for dyes................	"	—	754:250$
Tobacco, in leaf.............................	"	159.576	412:090$
Live plants, all kinds........................	"	—	45:686$
Unenumerated	"	—	93:945$
STONE, EARTHS AND OTHER SIMILAR MINERALS	"	—	**32.819:860$**
Asbestos....................................	"	6.930	9:223$
Argil, clay and moulders' sand................	"	1.119.537	84:094$
Coal..	"	943.564.243	27.904:732$
Patent fuel..................................	"	11.762.224	294:373$
Cement......................................	"	58.763.584	3.024:979$
Coke..	"	5.858.427	278:818$
Emery stone and powder......................	"	39.306	8:967$
Chalk and gypsum (plaster of Paris)...........	"	1.653.827	78:798$
Marble, alabaster and porphyry...............	"	1.666.013	230:937$
Precious stones..............................	"	—	420:595$
Unenumerated................................	"	—	484:344$
HIDES AND SKINS.............................	"	**799.872**	**6.533:761$**
Tanned and otherwise prepared................	"	795.327	6.517:819$
Sole leather.................................	"	4.545	15:942$
SILK..	"	**12.567**	**428:655$**
In cocoons, loose and waste..................	"	153	3:699$
Yarn and thread..............................	"	12.414	424:956$
VEGETABLE JUICES AND EXTRACTS..............	"	—	**4.450:193$**
Tar and pitch................................	"	538.599	81:907$
Vegetable oils or fat for industrial purposes....	"	4.101.259	2.672:363$
Oil and wine.................................	"	162	144$
Rosin..	"	10.683.378	1.209:835$
Wax and vegetable fat........................	"	233	543$
Gums, rosins and balsams, crude..............	"	210.932	254:140$
Unenumerated................................	"	—	231:261$
CLASS III—Manufactures..................	"	—	**202.998:926$**
COTTON, MIXED OR UNMIXED..................	"	—	**56.294:960$**
Tapestry, oilcloths and carpets...............	"	132.275	341:184$
Neckties....................................	"	—	25:213$
Hosiery	"	—	1.968:437$
Lace, frills, insertions, galloons, etc...........	"	—	3.212:085$
Wearing apparel.............................	"	—	3.263:293$

MERCHANDISE	UNIT	QUANTITY	C. I. F. VALUE IN BRAZIL. By Article In Mil Réis Paper
Class III—Continued.			
Piece goods, bleached	Kilo	2.434.805	7.956:854$
" " unbleached	"	196.937	420:737$
" " printed	"	4.157.299	15.760:607$
" " dyed	"	3.713.437	14.126:291$
" " unenumerated	"	1.372.844	4.146:475$
Unenumerated	"	—	5.073:784$
ALUMINUM	"	**6.653**	**43:903$**
Manufactures of aluminum	"	6.653	43:903$
ARMS AND AMMUNITION	"	—	**2 962:931$**
Artillery	"	—	599:845$
Lead bullets and shot, caps and cartridges	"	—	1.155:924$
Iron and steel bullets and cannon balls	"	2.066	4:658$
Fire arms, all kinds	"	—	939:587$
Swords, foils and other edged weapons	"	—	29:484$
Powder	"	59.661	166:318$
Unenumerated	"	—	67:115$
HAIR, FURS AND FEATHERS	"	—	**593:326$**
Brushes, all kinds, dusters and brooms	"	—	496:210$
Unenumerated	"	—	97:116$
CANE, BAMBOO, RUSH, RATTAN, OSIER AND SIMILAR	"	—	**63:156$**
Baskets and hampers	"	—	36:887$
Furniture	"	—	11:107$
Unenumerated	"	—	15:162$
CARRIAGES AND OTHER VEHICLES	"	—	**804:633$**
Railway coaches and freight cars	"	—	571:530$
Carriages and other vehicles unenumerated	"	—	233:103$
LEAD, TIN, ZINC AND ALLOYS	"	**387.141**	**722:147$**
Lead pipes	"	176.441	86:731$
Printers' type	"	86.809	330:712$
Unenumerated manufactures of lead and alloys.	"	12.074	18:305$
" " " tin and alloys	"	72.384	218:795$
" " " zinc and alloys.	"	39.433	67:604$
COPPER AND ALLOYS	"	—	**3.958:481$**
Copper wire, plain or naked and covered with paper, cotton, silk, rubber, etc. for all purposes, gilt or silver plated	"	621.729	814:081$
Christofle, plated ware and similar	"	44.171	533:792$
Objects of art (statues, medals, vases etc)	"	—	14:368$
Tubes and pipes	"	102.689	139:051$
Unenumerated	"	—	2.457:189$
IRON AND STEEL	"	—	**28.353:137$**
Fish hooks, spurs, stirrups, locks, buckles, bits, drawer handles and bolts, all kinds	"	—	632:267$
Steel and iron wire	"	14.683.824	3.496:248$
Galvanized corrugated sheets	"	3.209.454	961:643$
Cutlery	"	—	1.729:320$

MERCHANDISE	UNIT	QUANTITY	C. I. F. VALUE IN BRAZIL. By Article In Mil Réis Paper
Class III—Continued.			
Axles, wheels and parts thereof, for railway coaches and freight cars	Kilo	3.476.656	1.620:518$
Axles, wheels and parts thereof, for carriages and other vehicles unenumerated	"	382.005	215:714$
Tin plates and manufactures thereof unenumerated	"	7.271.492	2.705:394$
Staples or nails, screws and other structural iron for building houses, small boats, telephone and telegraphic posts, bridges, fences etc.	"	7.122.506	2.442:771$
Furniture	"	—	89:022$
Rails and parts for railways	"	38.507.325	5.947:850$
Tubes, pipes and fishplates	"	12.777.958	2.713:180$
Unenumerated	"	—	5.799:210$
MUSICAL INSTRUMENTS	"	—	**1.533:539$**
Pianos	"	—	525:789$
Unenumerated	"	—	1.007:750$
SURGICAL AND DENTAL INSTRUMENTS	"	—	**981:850$**
MATHEMATICAL, PHYSICAL, CHEMICAL AND OPTICAL INSTRUMENTS AND ARTICLES	"	—	**549:761$**
Optical instruments	"	—	160:448$
Unenumerated	"	—	359:313$
WOOL, MIXED OR UNMIXED	"	—	**9.508:927$**
Braids (frogs), tassels, loops, galloons, edgings, fringes, trimmings, tape, lacing other braids and beaded embroidery	"	—	155:459$
Tapestry and carpets	"	—	212:387$
Alpacas, muslins, lisle cloth, durance, merinós, damasks, cashmeres, princesses, grosgrains, swiss checks, plain and twilled flannels etc.	"	—	7.672:458$
Caps, skull caps, hoods, etc.	"	—	10:551$
Blankets	"	32.696	105:161$
Felts unenumerated and sarcenet	"	27.944	124:689$
Wearing apparel, all kinds	"	—	662:788$
Unenumerated	"	—	565:434$
LINEN, JUTE AND HEMP	"	—	**5.360:807$**
Braids (frogs), tassels, loops, galloons, edgings and fringes, mixed or unmixed	"	6.630	39:003$
Tapestry, oilcloths and carpets	"	—	112:963$
Hessians	"	362.977	267:054$
Twine	"	136.421	245:123$
Cordage	"	682.203	697:792$
Sheets, quilts, towels and napkins	"	—	268:127$
Lace, frills and insertions	"	—	21:309$
Wearing apparel	"	—	595:843$
Piece goods, unenumerated	"	693.958	2.505:775$
Unenumerated	"	—	607:818$
EARTHENWARE, GLASS, CHINA AND CRYSTAL	"	—	**6.032:990$**
Bottles, demijohns, pots, flasks and goblets or tumblers of glass or crystal	"	—	1.026:345$
Insulators	"	—	107:598$

MERCHANDISE	UNIT	QUANTITY	C. I. F. VALUE IN BRAZIL. By Article In Mil Réis Paper
Class III—Continued.			
Gauge and other glasses and funnels, graduated or not, and similar articles used in chemical and pharmaceutical laboratories and for electrical purposes	Kilo	—	69:413$
Lens for spectacles and eye glasses	"	242	5:722$
Polished glass, with or without foil	"	—	106:131$
Window glass	"	1.744.066	520:898$
Unenumerated manufactures of earthenware and china	"	—	3.133:694$
Unenumerated manufactures of glass and crystal	"	—	1.063:189$
MACHINERY, APPARATUS AND PARTS THEREOF, IMPLEMENTS AND TOOLS AND SUNDRY UTENSILS	"	—	**21.954:733$**
Alambics, stills, boilers and such like	"	—	807:962$
Appliances and accessories for electric light installations not enumerated elsewhere	"	—	2.240:619$
Photographical appliances and accessories	"	—	302:898$
Scales and other weighing machines	"	—	182:867$
Hydraulic Pumps	"	—	212:638$
Locomotives and parts thereof	"	—	1.651:505$
Motors and fixed engines and parts thereof	"	—	588:154$
Sewing machines and parts thereof	"	—	1.657:452$
Typewriting machines and parts thereof	"	—	83:061$
Agricultural machinery and for factories, and parts thereof	"	.	4.873:854$
Mills or grinders	"	—	253:254$
Presses, all kinds	"	—	37:778$
Cycles, all kinds and parts thereof	"	—	86:690$
Machinery, apparatus, implements and tools and sundry utensils unenumerated	"	—	8.976:001$
WOOD	"	—	**2.030:263$**
Furniture	"	—	792:003$
Tooth picks	"	36.230	153:902$
Cork	"	298.140	642:472$
Unenumerated	"	—	441:886$
IVORY, MOTHER O'PEARL, TORTOISE SHELL AND SIMILAR ANIMAL PRODUCTS	"	—	**531:539$**
Unenumerated manufactures of whalebone	"	88	1:285$
" " " mother o'pearl, coral, and ivory	"	—	67:865$
Unenumerated manufactures of buffalo and other horn and of bone	"	—	431:522$
Unenumerated manufactures of animal residues	"	—	30:867$
NICKEL	"	**9.179**	**56:933$**
Unenumerated manufactures	"	9.179	56:933$
GOLD, SILVER AND PLATINUM	"	—	**1.194:063$**
Gold Jewelry and other goldsmiths' manufactures with or without precious stones	"	—	716:598$
Silver Jewelry and other silversmiths' manufactures	"	—	467:122$
Unenumerated manufactures of Platinum	"	—	10:343$

MERCHANDISE	UNIT	QUANTITY	C. I. F. VALUE IN BRAZIL. By Article In Mil Réis Paper
Class III—Continued.			
STRAW, BROOM GRASS, COCOA FIBRE, PIASSAVA PITA, PAINA AND OTHER FIBROUS MATERIALS	Kilo	—	**453:152$**
Cordage	"	171.353	152:612$
Mats and matting	"	—	47:961$
Brooms and brushes	"	—	66:529$
Unenumerated	"	—	186:050$
PAPER AND MANUFACTURES THEREOF	"	—	**11.009:906$**
Playing cards	"	—	39:335$
Engravings, designs and photographs	"	—	160:497$
Books, newspapers, reviews, periodicals, music, maps and similar, bound or unbound	"	—	1.805:073$
Printed and lithographical matter, notes, invoices, envelopes, visiting cards and the like, all kinds	"	—	785:338$
Paper for unenumerated purposes	"	—	3.015:050$
Paper for writing	"	1.533.959	1.240:986$
Paper for printing	"	7.886.618	2.755:787$
Millboard and cardboard	"	1.600.097	559:259$
Unenumerated	"	—	648:581$
STONE, EARTHS AND SIMILAR MINERALS	"	—	**1.353:244$**
Unenumerated manufactures of asbestos	"	61.066	97:975$
Earthenware and clay pipes and tubes	"	3.252.737	361:577$
French tiles, mosaics, bricks and common tile	"	—	488:702$
Unenumerated	"	—	404:990$
SKINS AND LEATHER	"	—	**2.428:855$**
Harness, saddles and other unenumerated articles of saddlery	"	—	137:204$
Bags, hand, traveling and the like, toilet and similar cases and trunks	"	—	117:177$
Boots and shoes	"	—	1.152:288$
Belting	"	96.892	490:931$
Gloves	"	—	7:058$
Unenumerated	"	—	524:197$
PERFUMERY, DYES, PAINTS, ETC	"	—	**3.491:345$**
Boot blacking	"	146.278	222:664$
Perfumery	"	—	2.088:820$
Writing ink	"	81.660	98:939$
Paints and varnishes, all kind	"	—	1.080:922$
CHEMICAL PRODUCTS, DRUGS AND MEDICINES	"	—	**10.430:273$**
Acids	"	—	423:721$
Aerated and mineral waters	"	1.183.724	748:447$
Capsules, globules dragées and medicinal sweetmeats	"	—	193:532$
Glycerine	"	13.225	20:465$
Soap and soap tablets, medicinal	"	10.847	40:628$
Unenumerated	"	—	9.003:480$
SILK, MIXED AND UNMIXED	"	—	**4.167:033$**
Braids frogs), loops, tassels, lacing, galloons and similar	"	4.070	205:452$
Ribbons	"	22.171	1.155:359$
Neckties	"	—	105:169$
Lace	"	811	87:259$
Wearing apparel	"	—	206:180$
Piece goods	"	38.803	1.586:936$
Unenumerated	"	—	820:678$

MERCHANDISE	UNIT	QUANTITY	C. I. F. VALUE IN BRAZIL By Article In Mil Réis Paper
Class III—Continued.			
SUNDRY ARTICLES	Kilo	—	**26.163:039$**
Samples, all kinds	"	—	259:474$
Gymnastic appliances and articles for athletic and other sports	"	—	20:685$
Office and college stationery	"	—	719:703$
Articles for lighting by gas, kerosene, etc., etc.	"	—	834:778$
Walking sticks, canes and whips	"	—	84:072$
Buttons, all kinds	"	—	1.044:440$
Playthings or toys	"	—	885:225$
Pipes and cigar or cigarette holders	"	—	346:913$
Boxes and cases, all kinds	"	—	235:091$
Tinsel, bead work, etc., and passementerie gilt, etc	"	—	301:602$
Pocket books, cigar cases and purses	"	—	76:881$
Hats, all shapes and kinds	"	—	1.029:545$
Umbrellas and parasols, frames and other accessories for same (covers and cases excepted)	"	—	562:632$
Cigars, cigarettes, snuff and other manufactures of tobacco	"	—	184:396$
Clocks and watches and alarms	"	—	954:082$
Dynamite and other explosives	"	163.874	412:204$
Artificial flowers	"	—	59:493$
Fireworks	"	—	125:942$
Kerosene or petroleum and gasolene	"	62.239.652	10.054:984$
Fans, all kinds	"	—	207:209$
Sandpaper, all kinds	"	113.180	112:965$
Manufactures of rubber	"	—	2.072:672$
Manufactures of celluloid	"	—	337:839$
Steamers or sailing vessels, launches and other vessels	"	—	219:832$
Lubrifying oils, mineral, animal and vegetable	"	5.514.844	1.673:371$
Paraffine	"	330.939	206:781$
Matches	"	15.565	22:073$
Starch	"	952.414	472:757$
Framed pictures and looking glasses or mirrors	"	—	238:988$
Soap and saponaceous substances, unscented	"	1.428.408	547:200$
Candles, wax, spermaceti, stearine, and tallow.	"	572.487	617:853$
Unenumerated	"	—	1.240.457$
CLASS IV—Food Stuffs and Fodder	"	—	**173.825:952$**
Alfalfa (lucerne)	"	21.997.507	1.639:023$
Garlic and onions	"	7.008.991	1.704:898$
Rice	"	100.984.581	18.509:270$
Sugar	"	53.727	18:303$
Olive oil	"	2.371.288	2.907:869$
Cod fish	"	28.186.035	14.284:479$
Lard	"	4.206.756	5.143:853$
Potatoes	"	23.379.876	3.555:093$
Alcoholic beverages	"	840.358	1.042:349$
Unenumerated beverages	"	60.103	65:785$
Biscuits, sailors' and others	"	156.829	249:384$
Cereals and other grain unenumerated	"	1.709.164	470:546$
Barley corn	"	127.590	43:993$
Beer	"	803.409	676:521$
Tea	"	229.562	612:257$
Chocolate, cocoa, confectionery and sweetmeats	"	81.803	211:248$
Preserved meats and extracts	"	289.846	610:810$

MERCHANDISE	UNIT	QUANTITY	C. I. F. VALUE IN BRAZIL. By Article In Mil Réis Paper
Class IV—Continued.			
Preserved fruits and vegetables	Kilo	874.956	882:961$
Preserved fish	"	2.123.433	1.877:563$
Spices	"	1.039.390	1.164:180$
Bran	"	1.321.491	147:389$
Wheat flour	"	105.590.991	24.064:329$
Flours and meal unenumerated	"	522.717	294:969$
Beans, all kinds	"	6.011.530	1.671:190$
Fodder, unenumerated	"	32.576	5:488$
Fruits and vegetables, dry	"	1.141.822	912:480$
Fruits and vegetables, fresh, and nuts, chestnuts and filberts	"	5.626.806	2.725:059$
Condensed milk	"	1.284.148	1.132:708$
Liqueurs and syrups	"	92.101	200:966$
Butter	"	2.844.430	6.912:374$
Macaroni and similar pastes	"	183.418	91:772$
Maize	"	4.483.704	526:730$
Eggs	"	1.876	3:330$
Hams	"	295.454	656:865$
Cheese	"	1.389.190	2.431:253$
Common salt	"	37.323.099	1.255:706$
Bacon	"	769.266	1.031:900$
Wheat	"	149.718.556	20.194:838$
Vinegar	"	293.779	104:501$
Champaign and other sparkling wines	"	78.345	333:105$
Wines, unenumerated	"	56.447.588	26.888:282$
Vermouth, bitters and similar wines	"	—	924:799$
Jerked beef (xarque)	"	48.532.110	25.393:896$
Unenumerated	"	—	251:629$
CLASS IV—Specie and Foreign Bank Notes	"	—	**19.848:825$**
£ sterling	"	939.769	18.915:567$
Liras	"	393.000	312:949$
Réis	"	57.807	201:838$
Argentine dollars	"	50.400	197:770$
Francs	"	227.600	183:707$
Uruguayan dollars	"	5.550	23:938$
Pesetas	"	17.875	10:531$
Soes (Bolivia)	"	530	1:070$
Marks	"	1.000	990$
U. S. Dollars	"	112	465$

SUMMARY BY CLASSES	C. I. F. VALUE IN BRAZIL		
	Total in Mil Réis Paper	Total in Mil Réis Gold (27 D.)	Percentage on the Value Total
Class I—Animals, Living and Stuffed	5.096:677$	2.239:584$	1,08
Class II—Materials, Raw or Prepared for use in Arts and Industries	89.192:565$	39.168:872$	18,93
Class III—Manufactures	202.998:926$	89.185:639$	43,10
Class IV—Food Stuffs and Fodder	173.825:952$	76.334:065$	36,89
TOTAL OF MERCHANDISE	**471.114:120$**	**206.928:160$**	**100,00**
Class V—Specie and Foreign Bank Notes	19.848:825$	8.766:234$	
GRAND TOTAL	**490.962:945$**	**215.694:394$**	

BRAZIL

EXPORTS OF NATIONAL AND NATIONALIZED PRODUCTS.

1902.

MERCHANDISE	UNIT	QUANTITY	F. O. B. VALUE By Article In Mil Réis Paper
CLASS I—Animals and Their Products	....	—	**35.929:918$**
1 Animals, preserved for collections	Kilo	171	840$
2 Animals, living	"	45	220$
3 Scrap leather	"	4.025	104$
4 Manufactures of feathers	"	—	—
5 Whale oil	"	1.174.564	246:811$
6 Leather trunks	"	1.620	5:687$
7 Lard	"	13.340	16:623$
8 Imitation whalebone	"	4.261	7:006$
9 Fish bladders	"	22.069	48:012$
10 Boots and shoes	"	150	1:263$
11 Dried shrimps	"	3.528	2:418$
12 Cinnamon	"	250.630	15:446$
13 Pack saddles (cangalhas)	"	1.745	2:265$
14 Preserved meat	"	7.122	3:535$
15 Tortoise shells	"	485	5:972$
16 Wax	"	149.196	323:686$
17 Horns	"	1.162.375	515:527$
18 Slippers	"	236	1:424$
19 Bone ash	"	4.367.370	183:430$
20 Shells	"	—	—
21 Hides, tanned	"	260	3:050$
22 " salt	"	20.354.100	14.296:229$
23 " dry	"	6.501.890	8.259:863$
24 Horse or cow hair and bristles	"	482.462	732:001$
25 Extracts of meat	"	260.878	1.180:383$
26 Live stock, Horses	Head	2	500$
27 " " Asses and mules	"	113	37:600$
28 " " Cattle	"	821	22:585$
29 Hoofs	Kilo	536.973	36:388$
30 Glycerine	"	247.009	162:955$
31 Grease	"	191	88$
32 Fish glue	"	57.003	207:098$
33 Guano	"	—	—
34 Wool	"	972.039	810:220$
35 Tongues	"	25.289	45:246$
36 Butter	"	988	1:970$
37 Honey	"	18.958	9:110$
38 Ears	"	—	—
39 Bones	"	463.457	22:055$
40 Oysters	"	110.979	22:256$
41 Fish, dried and preserved	"	6.510	9:909$
42 Over saddle cloths (*pellegos*)	"	3.017	4:494$
43 Skins, goat	"	1.483.813	7.387:422$
44 " sheep	"	279.020	622:516$
45 " lamb	"	15.368	29:258$
46 " deer	"	154.192	322:666$
47 " other	"	3.822	10:920$
48 Feathers, emu	Gram.	3.658.500	38:658$
49 " heron	"	110.635	114:689$
50 " other	"	399.000	4:890$
51 Horn tips	Kilo	560	240$
52 Cheese	"	2.376	5:720$
53 Stearine residues	"	51.914	14:010$
54 Scrap sole leather	"	18.000	1:030$
55 Soap	"	14.845	7:617$

MERCHANDISE	UNIT	QUANTITY	F. O. B. VALUE By Article In Mil Réis Paper
Class I—Continued.			
56 Horn piths	Kilo	199.100	7:692$
57 Tallow	"	576	508$
58 Saddles	"	20	120$
59 Sole leather	Half	3.148	26:051$
60 Piths	Kilo	53.674	9:574$
61 Undressed leather (*vaquetas*)	"	4.191	23:344$
62 Candles	"	872	2:587$
63 Jerked beef (*xarque*)	"	63.796	56:137$
CLASS II—Minerals and Their Products	—	—	**17.331:858$**
1 Mineral waters	Kilo	1.610	967$
2 Monasite sands	"	1.205.080	1.110:416$
3 Iron buckets or pails	"	1.159	2:860$
4	"	240	560$
5 Shot	"	4.794	3:693$
6 Goldsmiths' dust	"	10.576	16:437$
7 Crystal	"	35.460	54:579$
8 Hardware	"	1.010	1:054$
9 Fireworks (rockets)	"	49	263$
10 Jewels	—	—	13:798$
11 Manganese	Ton.	157.295	4.465:328$
12 Earthenware	Kilo	2.166	1:845$
13 Manufactures of iron	"	10	50$
14 Manufactures of sheet tin	"	1.174	2:696$
15 Manufactures of glass	"	1.476	800$
16 Manufactures of marble	"	—	—
17 Scrap metal, steel and iron	"	3.822.287	185:692$
18 " " lead and zinc	"	63.216	26:776$
19 " " other	"	277.452	276:238$
20 Mica	"	10.707	17:642$
21 Lead ore	"	—	—
22 Copper ore	"	234.369	14:460$
23 Iron ore	"	760	60$
24 Minerals unenumerated	"	1.836	140$
25 Gold, bar	Gram.	3.989.682	8.754:342$
26 " scrap	"	11.873	25:168$
27 Stones, agate	Kilo	81.094	8:288$
28 " carbons	Gram.	2.428	832:615$
29 " diamonds	"	13.737	1.333:128$
30 " common	Kilo	44.027	4:926$
31 " other precious	Gram.	2.662.825	72:859$
32 Matches	Kilo	3.863	10:683$
33 Platinum	"	—	—
34 Powder	"	2.072	10:992$
35 Scrap silver	Gram.	378.900	21:827$
36 Gold and silver manufactures	Kilo	12.800	10:468$
37 Wire nails	"	1.114	1:171$
38 Arsenic residues	"	—	—
39 Salt	"	13.770	1:885$
40 Talc	"	—	—
41 Tiles, earthenware	"	—	—
42 Alluvial gold-sands	"	1.000	3:200$
43 (tijelinhas)	"	32.639	41:975$
44 Bricks	"	42.000	1:330$
45 (trempes de ferro)	"	421	647$
CLASS III—Vegetables and Their Products	—	—	**682.678:349$**
1 Staves and hoops for barrels and hogsheads	Kilo	411.640	74:060$
2 Rum (aguardente)	Litre	147.207	50:207$
3 Ox goads	Kilo	—	—

MERCHANDISE	UNIT	QUANTITY	F. O. B. VALUE By Article In Mil Réis Paper
Class III—Continued.			
4 Alcohol	Litre	18.253	5:226$
5 Raw cotton	Kilo	32.137.678	24.336:417$
6 Pea or monkey nuts	"	—	—
7 Araroba	"	5.640	9:745$
8 Rice	"	2.670	972$
9 Sugar, white	"	565.216	190:880$
10 " crystal	"	3.000	870$
11 " demerara	"	3.256.100	466:283$
12 " brown (*mascavo*)	"	132.932.943	18.345:503$
13 Oil	"	80	100$
14 Castor seed or beans	"	2.387.726	302:797$
15 Trunks (marupá wood)	"	—	—
16 Barba timao (medicinal herb)	"	100	30$
17 Vanilla	"	7	66$
18 Unenumerated beverages	"	180	210$
19 Biscuits, sailors' and others	"	21.078	18:955$
20 Caps	"	—	—
21 Rubber, mangabeira	"	350.194	925:446$
22 " maniçoba	"	807.388	2.685:934$
23 " seringa	"	27.474.278	144.107:366$
24 Broom handles	"	—	—
25 Cocoa	"	20.642.412	20.691:613$
26 Coffee, in the bean	Bag.	13.157.383	409.840:526$
27 " ground	Kilo	5.175	4:966$
28 Wooden boxes or cases	"	3.500	850$
29 Hemp	"	3.421	3:350$
30 Cotton seed	"	30.386.671	1.867:690$
31 Brazil nuts	Hectol	148.301	3.271:288$
32 Carnauba wax	Kilo	1.547.171	1.698:875$
33 Beer	Bottle	18.240	20:210$
34 Hats	Kilo	634	3:704$
35 Cigars	No.	1.193.089	201:790$
36 Cigarettes	Kilo	4.359	34:646$
37 Confetti	"	—	—
38 Wreaths	"	—	—
39 Cloves	"	1.430	2:875$
40 Cumaru pepper	"	48.450	100:228$
41 Jams or jellies, guava	"	33.635	46:327$
42 " " other	"	10.910	13:430$
43 Sleepers	No.	4.354	27:829$
44 Axles for small carts	Kilo	76.600	5:312$
45 Mats and matting	"	180	156$
46 Waste	"	7.264	3:970$
47 Mango syrup	"	3.000	1:800$
48 Bran	"	18.498.353	1.713:441$
49 Flour, manioc or cassiava flour	"	6.214.009	722:607$
50 " maize	"	50	35$
51 " other	"	3.572	1:902$
52 Beans	"	11.043	3:168$
53 Feijoada	"	1.121	1:720$
54 Vegetable fibres	"	—	—
55 Mango leaves	"	65	40$
56 Leaves, rosins and roots, medicinal	"	632.276	587:890$
57 Fruit, Alligator pears (*abacates*)	"	2.232	663$
58 " Pine apples	"	120.812	90:153$
59 " Bananas	Bunch	994.919	392:508$
60 " Coconuts	Hund'd	2.755	32:427$
61 " Palm nuts (*coquilhos*)	Kilo	49.463	6:210$
62 " Oranges	Hund'd	8.426	33:224$
63 " Mangoes	Kilo	—	—

MERCHANDISE	UNIT	QUANTITY	F. O. B. VALUE By Article In Mil Réis Paper
Class III—Continued.			
64 Fruit, Tangerine oranges	Kilo	4.000	700$
65 " all other	"	3.947	570$
66 Tobacco, cut	"	6.291	43:980$
67 " twist or cord	"	641.325	479:203$
68 " leaf	"	44.552.715	23.835:187$
69 Copal gum	"	25.845	27:896$
70 Matte	"	41.928.586	21.930:470$
71 Ipecacuanha	"	22.639	517:467$
72 Rafts (*jangada*)	"	1.600	600$
73 Vegetable wool (*lá de barriguda*)	"	567	346$
74 Fresh vegetables	"	1.000	850$
75 Firewood	"	92.600	440$
76 Liqueur, peach	"	—	—
77 Timber, acapú	"	82.853	17:281$
78 " brejaúba	"	—	—
79 " cedar	"	7.000	882$
80 " Gonçalo Alves	"	—	—
81 " jacarandá (rose wood)	"	2.129.911	567:697$
82 " massarandúba	"	195.581	12:786$
83 " brazil wood	"	270.391	19:738$
84 " pine	Planks	64.057	39:722$
85 " pine	Boards	9.974	10:819$
86 " other	Kilo	189.631	36:947$
87 Manufactures of cotton	"	40	511$
88 Pastes (macaroni and similar)	"	—	—
89 Medicines (patent)	"	7.156	35:831$
90 Molasses or treacle	"	97.120	8:969$
91 Pichois	"	6.100	8:283$
92 Maize	"	3.075.910	313:531$
93 Manufactures of wool	"	1.100	15:255$
94 Cottonseed oil	"	50	38$
95 Copahyba oil	"	66.001	174:348$
96 Unenumerated vegetable oils	"	720	612$
97 Vegetable silk	"	—	—
98 Corn leaf for cigarettes	"	—	—
99 Carnahuba straw	"	1.180	990$
100 Piassava	"	1.889.724	1.169:538$
101 Peppers, all kinds	"	50	85$
102 Live plants	—	—	105:168$
103 Rice powder	Kilo	—	—
104 Starch	"	92.227	19:904$
105 Fence posts	"	—	—
106 Cake sugar (*rapadura*)	"	303	172$
107 Snuff	"	10.399	46:488$
108 Oars	"	30	60$
109 Hammocks and fishing nets	"	330	3:596$
110 Cottonseed residues	"	91.432	29:160$
111 Wearing apparel	"	—	—
112 Old postage stamps (obliterated)	"	—	—
113 Seeds	"	22.637	20:791$
114 Tobacco dust	"	200	250$
115 Tapioca	"	262.198	59:286$
116 Fishing nets (tarrafas)	"	82	450$
117 Cotton piece goods	"	2.821	17:545$
118 Ticum fibre	"	12.208	55:754$
119 Writing ink	"	1.337	1:422$
120 Brooms	"	87	173$
121 (Vigas falquejados)	No.	214	6:960$
122 Vinegar	Kilo	150	132$
123 Wines	"	595	975$

BRAZILIAN PAVILION—SOUTHWEST VIEW

COLONEL F. M. de SOUZA AGUIAR
President of Commission

INTERIOR VIEWS OF THE BRAZILIAN BUILDING

1—Stair Case. 2—Ladies' Reception Room.
3—Central Statue in Reception Hall.
4-5—Reception Hall.

MAJOR J. DA CUNHA PIRES
Secretary of Commission

BRAZIL made an appropriation of $600,000 for her representation at the Louisiana Purchase Exposition, where there is not only a National Building, but also comprehensive and classified exhibits in 12 of the 15 Departments.

The Brazilian Building is located in the southwestern part of the section occupied by Foreign Governments, having on its north the Belgian, Cuban and Chinese Buildings; on the east that of Nicaragua; on the south those of France and India, and on the west the Forestry, Fish and Game, Italian and Administration Buildings.

In the centre of the grounds, surrounded by lawns with flower-beds and wide gravel walks, stands the Brazilian Building in the French renaissance style of architecture, the body of which is rectangular in form, with two circular loggias at either end. The main cornice, 80 feet high, is supported by eight groups of three columns each at the corners and sides of the two entrances of the building, and by six single columns at each loggia. These thirty-six columns are of the Corinthian style of architecture, without the fluting ordinarily used with this particular column, and are ornamented only at the lower third of the shaft with the Brazilian coat-of-arms between floral festoons.

Projecting above the roof of the building are three domes, two of which, on either loggia, are spherical in form, being 44 feet in diameter, while the apex of the central dome attains a height of 135 feet from the ground.

This dome is octagonal in shape, having at each corner an exterior buttress, adorned with a large statue of an angel at its top.

Encircling this large dome is a gallery from which can be viewed the greater part of the Exposition Grounds and the surrounding country.

Above the cornice of the building is a balustrade, decorated with shields, showing the coats-of-arms of the twenty-one States of Brazil.

The main floor is reached by means of a flight of nineteen granitoid steps, on either the north or south side of the building, which lead through two spacious porticos. This floor forms one large room only, the ceiling of which is divided into rectangular panels, supported by thirty-two Doric columns. The loggias can be approached from this level and one can reach the second floor by a majestic double stair-case, where there is a spacious Reception room, two apartments for ladies, and the offices of the Commission.

In the centre of the Reception room is a marble statue representing "The Feast," mounted on a large pedestal, which is encircled by an upholstered settee. Above this statue the large central dome opens, supported by eight columns, which forms an interior gallery.

The Commissioner-General, Colonel F. M. de Souza Aguiar, designed and personally supervised the construction of the Brazilian Government Building.

At the official inauguration, on the evening of May 24th, 1,500 guests were present. President Francis sent the following telegram to the President of Brazil:

St. Louis, Missouri, May 25th, 1904.

His Excellency the President of Brazil, Rio de Janeiro:

Brazil's Pavilion was opened last evening and made the occasion of one of the most brilliant social functions ever held in St. Louis. The structure is beautiful in design and perfect in detail and admired by all.

Congratulate Brazil on efficiency of Commissioner-General Aguiar and associates. Exposition highly appreciates Brazil's participation.

D. R. FRANCIS.

INTERIOR VIEWS OF BRAZILIAN PAVILION.

BRAZILIAN SECTION.

DEPARTMENT OF EDUCATION

GROUPS 1 to 8

THE exhibit of Brazil in this department consists principally of work done by pupils of the schools of different grades, some of which are maintained by the State or Municipal Governments; others by private parties or by the Federal Government. A few photographs, plans of buildings, and some publications and school furniture are also shown. The Polytechnic, Mining, Medical, Fine Arts, Conservatory of Music, Law, Naval and Military Schools, and Schools for the Blind and Deaf Mutes and Orphans at Rio de Janeiro, Minas Geraes, Bahia, Recife, S. Paulo and Rio Grande do Sul are maintained by the Federal Government. Each state has its own system of elementary, secondary and higher education, Agricultural, Commercial and Manual Training Schools, etc. Besides these there are many municipal and private schools where elementary, secondary and technical education is given.

All of the technical schools are well equipped with libraries, laboratories, furniture, appliances of different kinds, tools, machinery, specimens, maps, models, and the highest standard of scientific and technical education is maintained. Public libraries and museums, which are free to all classes in the larger cities, contribute greatly to their education.

Besides the Scientific and Technical Schools, above mentioned, maintained by the Federal Government, there are others supported by the State Governments of Pernambuco, Bahia, Minas Geraes, S. Paulo and Rio Grande do Sul. Also a few private ones which confer degrees recognized by the Government, which makes appropriations for their maintenance.

Brazil having decided to take part in this Exposition at the

MR. J. B. da MOTTA,
Commissioner in charge of Department of Education.

last moment, there was not sufficient time to prepare an exhibit that would give a satisfactory idea of the development of public and private education in the elementary, training, technical and scientific branches of this important department. The educational work of Defectives and of the Indians would have formed a specially interesting exhibit. Among the exhibitors in this section the following may be mentioned:

Municipality of Rio de Janeiro, Medical School of Rio de Janeiro, The Hospital of Mercy Association of Rio de Janeiro, The Salesian Fathers of Matto Grosso, The D. Bosco School of Minas Geraes and the Mining School of Ouro Preto, The State Governments of Amazonas, Pará, Bahia, S. Paulo and Paraná, The Medical School of Bahia, The Polytechnic School of S. Paulo, The School of Pharmacy of S. Paulo, The Santissimo Coração de Jesus School of Bahia, The Orphan Asylum of Bahia, The Sagrado Coração Lyceum of S. Paulo, The Luz Stearica Co. School and The Senador Correa School of Rio de Janeiro, The Sagrado Coração de Jesus Indian School of Matto Grosso, The Joinville Commission of Santa Catharina, The Gymnasium N. S. da Conceição of Rio Grande do Sul and a few others. The exhibits include text-books, maps and school appliances and furniture.

GROUP 1.

Elementary Education.

Associação Promotora de Instruccão, Rio de Janeiro.

PHOTOGRAPHS.

Brazilian Government, Rio de Janeiro.

EDUCATIONAL DISPLAY.

Casa de S. José, Federal Capital.

PHOTOGRAPHS.

DRAWINGS BY PUPILS.

This is a school for destitute children, maintained by the Municipality of Rio de Janeiro. Elementary and manual education is given.

Collegio Maria Auxiliadora, Matto Grosso.

SAMPLES OF ART WORK BY PUPILS.

A school for girls conducted by the Sisters of Mercy, where elementary and secondary instruction is given and domestic work taught.

Escola Normal, Federal Capital.

DRAWINGS BY PUPILS.

School maintained by the Municipality of Rio de Janeiro for the education and training of teachers.

Escola Normal, S. Paulo.

DRAWINGS BY PUPILS.

School for the education and training of teachers, kept up by the State Government.

Escolas Modelo, "Benjamin Constant" and "Rua da Harmonia," Federal Capital.

PHOTOGRAPHS.

MAPS BY PUPILS.

In these schools a five-year course of training for normal school pupils is required by the Municipality of Rio de Janeiro.

Escolas Modelo, "Maria José" and "Prudente de Moraes," S. Paulo.

WORK BY PUPILS.

The State Government maintains several of these schools for the training of pupils of the Normal Schools—the course covering a period of five years. In localities where there are five or more preliminary schools, these constitute a group in which the same course is pursued as in the Model Schools.

Escolas Municipaes, Bahia.

MANUAL WORK BY PUPILS.

Elementary and secondary education is given by the Municipality of the Capital of Bahia in these schools.

Escola Senador Correa, Federal Capital.

PHOTOGRAPHS.

This is one of the schools maintained by the Philanthropic Association for the Promotion of Instruction, in which elementary instruction is given to children during the day and to adults in the evening.

Institutos Profissionaes Masculino and Feminino, Federal Capital.

WORK BY PUPILS.

These are Manual Training Schools for poor boys and girls. Bookbinding, shoemaking, carpentry, cabinet work and other trades are taught at the expense of the Municipality of Rio de Janeiro.

Prefeitura, Federal Capital.

SAMPLES OF WORK BY PUPILS OF THE ELEMENTARY PUBLIC SCHOOLS OF THE MUNICIPALITY OF RIO DE JANEIRO.

Pedro J. de Carvalho, Minas Geraes.

PHOTOGRAPH OF ELEMENTARY SCHOOL BUILDING AT MAR D'HESPANHA.

Secretaria do Interior, S. Paulo.

SAMPLES OF WORK BY PUPILS OF PUBLIC SCHOOLS MAINTAINED BY THE STATE GOVERNMENT.

Secretaria do Interior, Bahia.

PHOTOGRAPHS OF BUILDINGS.

The State of Bahia maintains a very complete system of public instruction. In addition to a large number of public and private elementary and secondary schools, the Municipalities of the interior of the State keep up also a great many smaller elementary schools.

GROUP 2.

Secondary Education.

Benjamin Constant, Instituto, Amazonas.

PHOTOGRAPHS OF BUILDINGS.
SAMPLES OF WORK BY PUPILS.

Commissão do Estado, Amazonas.

PHOTOGRAPHS OF PUBLIC SCHOOL BUILDINGS.

Besides the Public Schools and the Institute above mentioned, the State of Amazonas maintains a Gymnasium, Normal School, Orphans' School, Fine Arts School and Model Schools in different parts of the State, all in new buildings, some of which are magnificent. There are also quite a number of private schools in the State.

Collegio Salesiano de Cuyabá, Matto Grosso.

PHOTOGRAPHS OF SCHOOL BUILDING AND SHOPS.

VIEWS OF METEOROLOGICAL OBSERVATORY.

PHOTOGRAPHS OF SCHOOL AT CORUMBÀ.

REGULATIONS AND RULES OF THE SCHOOLS.

The Salesian Fathers have two very finely equipped schools in this State, in which a high grade of education (elementary, secondary, professional and training) is given to children of all classes, preparing them for the higher scientific schools, etc. Special courses in Commerce, Fine Arts, Meteorology, Agriculture, Trades, etc., are also given.

Collegio S. Luiz, Minas Geraes.

WORK OF PUPILS.

Commissão do Estado, Matto Grosso.

PHOTOGRAPHS OF PUBLIC SCHOOL BUILDINGS.

RULES AND REGULATIONS OF PUBLIC INSTRUCTION.

The State of Matto Grosso keeps up a large number of Elementary and Secondary Schools and one High School, which prepares teachers for the Public Schools and students for the Technical and Scientific Schools.

Escolas Dom Bosco, Minas Geraes.

PHOTOGRAPHS OF SCHOOL BUILDINGS.

This school is kept up by Catholic Fathers. In it Elementary, Secondary and Higher Instruction and Manual Training are given to boys.

Governo do Estado, Matto Grosso.

WORK OF PUPILS.

Instituto Lauro Sodré, Pará.

PHOTOGRAPHS OF BUILDINGS AND WORK OF PUPILS.

A very efficient school where Elementary and Secondary Instruction and Practical Education are given by the State to destitute boys, and where they are also taught different trades and arts.

Januario da Silva Rondon, Matto Grosso.

PLAN OF BUILDING OF LYCEO CUYABANO.

This Lyceum is one of the highest graded schools in the State.

Orphãs, Asylo de, Bahia.

SAMPLES OF WORK BY ORPHAN GIRLS.

Prefeitura, Federal Capital.

PHOTOGRAPHS OF SCHOOL BUILDINGS.

Secretaria do Interior, S. Paulo.

PHOTOGRAPHS OF PUBLIC SCHOOL BUILDINGS.

Santissimo Coração de Jesus, Collegio, Bahia.

SAMPLES OF WORK BY PUPILS.

Sagrado Coração, Lyceo do, S. Paulo.

WORK OF PUPILS.

In this school, maintained by the Salesian Fathers, Elementary and Secondary Instruction is given to poor boys. There they also receive a practical training in the various trades. Some fine samples of furniture and cabinet work are exhibited.

GROUP 3.

Badariotti, Padre Nicolao, **Minas Geraes.**

PHOTOGRAPHS OF "COLLEGIO SÃO LUIZ."

Escola de Medicina, **Bahia.**

PHOTOGRAPHS.

Escola de Medicina, **Federal Capital.**

These schools, in which Medicine and Pharmacy are taught, are maintained by the Federal Government, many noted men, well-known in Europe, having graduated from them.

Escola de Minas de Ouro Preto, **Minas Geraes.**

SCHOOL RECORDS FOR 9 YEARS.

Escola de Pharmacia, **S. Paulo.**

PREPARATIONS MADE BY PUPILS.

This school is maintained by the State Government.

Escola Polytechnica, **S. Paulo.**

MODELS AND APPLIANCES MADE BY PUPILS.

Maintained by the State Government.

GROUP 6.

Special Education in Commerce and Industry.

Andrade, D. Elisa Usel de, **Bahia.**

WORK OF PUPILS.

Casa dos Expostos, **Federal Capital.**

WORK BY FOUNDLINGS (GIRLS).

Trades are taught to girl foundlings in this asylum, which is supported by the Hospital of Mercy Association of Rio de Janeiro.

Collegio do Santissimo Coração de Jesus, **Bahia.**

NEEDLE-WORK BY PUPILS.

Collegio 8 de Dezembro, **Bahia.**

WORK OF PUPILS.

Escolas Modelo "Benjamin Constant" and "Rua da Harmonia," **Federal Capital.**

NEEDLE-WORK BY PUPILS.

These schools are kept up by the Municipality of Rio de Janeiro.

Escolas Modelo do "Carmo," "Maria José," "Prudente de Moraes" and "Caetano de Campos," **S. Paulo.**

NEEDLE-WORK BY PUPILS.

These schools are maintained by the State Government.

Escola Normal, **Federal Capital.**

STENOGRAPHIC WORK BY PUPILS.

Belongs to the Municipality of Rio de Janeiro.

Escola Normal, **S. Paulo.**

NEEDLE-WORK BY PUPILS.

Belongs to the State Government.

2a, 5a, 8a and 12a Escolas Publicas do 2o, 5o and 6o Districtos, **Federal Capital.**

NEEDLE-WORK BY PUPILS.

These are Public Schools maintained by the Municipality of Rio de Janeiro.

Escola da Comp. Luz Stearica, **Federal Capital.**

NEEDLE-WORK BY PUPILS.

This is a school kept up by the Luz Stearica Co. for the education of the children of the working men and women employed in their factory.

Escolas Municipaes de Sto. Antonio, Pilar, Penha, S. Pedro, S. Thomé and Sé, **Bahia.**

NEEDLE-WORK BY PUPILS.

Instituto Lauro Sodré, **Pará.**

WORK BY PUPILS OF THE TRADES SCHOOL.

Instituto Profissional Feminino, **Federal Capital.**

NEEDLE-WORK BY PUPILS.

Orphans da Sta. Casa e do Asylo de S. Cornelio, **Federal Capital.**

EMBROIDERY AND NEEDLE-WORK BY PUPILS.

These asylums are kept up by the Hospital of Mercy Association of Rio de Janeiro.

This Charitable Association owns several magnificent hospitals and asylums where assistance, treatment and education are given to the poor, poor children and foundlings.

Padre Balzala, Director da Colonia "Sagrado Coração de Jesus," **Matto Grosso.**

SAMPLES OF NEEDLE-WORK BY INDIAN CHILDREN FROM 7 TO 11 YEARS OF AGE.

This Indian Colony is supported by Catholic Missionary Fathers, who maintain schools and shops where the grown up Indians of the "Bororós Coroados" tribe and their children are educated.

Professora Amelia C. Brochado, **Bahia.**

NEEDLE-WORK BY HER PUPILS.

Santa Casa de Misericordia, **Rio de Janeiro.**

WORK OF PUPILS.

Secretaria do Interior, **Bahia.**

SCHOOL APPARATUS.

GROUP 8.

Special Forms of Education, Text Books, School Furniture and School Appliances.

Artes e Officios, Lyceo de, **Amazonas.**
SCHOOL FURNITURE USED IN THE STATE SCHOOLS.

Associação Promotora de Instrucção, **Federal Capital.**
SCHOOL BOOKS.

This is an Association that maintains several day and evening schools for children and adults of the working classes.

Brito, Paulino de, **Amazonas.**
SCHOOL BOOKS.

Commissão de Joinville, **Sta. Catharina.**
SCHOOL FURNITURE USED IN THE PUBLIC SCHOOLS OF THE STATE.

Commissão de Curityba, **Paraná.**
FURNITURE USED IN THE STATE SCHOOLS.

Dordal, Ramon Roca, **S. Paulo.**
METRICAL SYSTEM APPARATUS.

Escola Normal, **Federal Capital.**
SCHOOL APPLIANCES AND TEXT BOOKS.

Escola Normal, **S. Paulo.**
SCHOOL APPLIANCES.

Escola Polytechnica, **S. Paulo.**
SCHOOL APPLIANCES.

Espinola, Siqueira & Co., **S. Paulo**
SCHOOL BOOKS.

Escola de Pharmacia, **S. Paulo.**
SCHOOL APPLIANCES AND TEXT BOOKS.

Escola de Medicina, **Bahia.**
PUBLICATIONS, BOOKS, MAPS AND PHOTOGRAPHS.

Escola de Medicina, **Federal Capital.**
PHOTOGRAPHS.

Esteves, Honorio, **Minas Geraes.**
CHROMATIC ALPHABET.

Freitas, A. de Paula **Federal Capital.**
TEXT BOOKS.

Governo do Estado, **S. Paulo.**
SCHOOL APPLIANCES USED IN THE MODEL SCHOOLS.

Gymnasio N. S. da Conceição, **Rio Grande do Sul.**
SCHOOL BOOKS AND PHOTOGRAPHS.

Governo do Estado, **Amazonas.**
PUBLICATIONS.

Gymnasio, **S. Paulo.**
SCHOOL APPLIANCES.

Instituto Historico e Geographico, **Rio de Janeiro.**
PUBLICATIONS.

Instituto Lauro Sodré, **Pará.**
SCHOOL APPLIANCES AND BOOKS.

Instituto Geo. e Historico, **Bahia.**
PUBLICATIONS.

Livraria Teixeira, **S. Paulo.**
SCHOOL BOOKS.

Lyceo do Sagrado Coração, **S. Paulo.**
SCHOOL APPLIANCES AND GEOGRAPHICAL MAPS.

Luiz da Silva, **S. Paulo.**
SCHOOL BOOKS.

Lepper, Fernando, **Sta. Catharina.**
SCHOOL FURNITURE.

Mayer Junior and Co., João, **Rio Grande do Sul.**
SCHOOL BOOKS AND MAPS.

Miguel Mellilo, **S. Paulo.**
SCHOOL BOOKS.

Museo Paraense, **Pará.**
PUBLICATIONS.

Museo Paulista, **S. Paulo.**
PUBLICATIONS.

Medeiros and Co., **S. Paulo.**
SCHOOL BOOKS.

Prefeitura Municipal, **Federal Capital.**
SCHOOL APPLIANCES USED IN THE MODEL SCHOOLS.

Sampaio, Dr. Theodoro, **S. Paulo.**
SCHOOL BOOKS.

Secretaria da Agricultura, **Bahia.**
BOOKS AND LEGISLATION.

Secretaria do Interior, **S. Paulo.**
SCHOOL FURNITURE.

Rottermund, M., **Rio Grande do Sul.**
SCHOOL BOOKS.

Tito H. Silva, **Parahyba.**
SCHOOL BOOKS.

Typographia Brazil de Carlos Gerke, **S. Paulo.**
SCHOOL BOOKS.

Typographia do Diario Official, **S. Paulo.**
SCHOOL BOOKS AND APPLIANCES.

DEPARTMENT OF FINE ARTS

GROUPS 9 to 14

OWING to the late decision of the Brazilian Government to participate in the Exposition, a few works of art only are exhibited, from which a slight idea of the advancement of art in that country can be formed. These consist of paintings, mostly, and both in landscape and figure they portray the life and atmosphere of the country.

Many of those who visited the Chicago Exposition will still remember the excellent exhibit Brazil had at the Columbian World's Fair in all branches of the Fine Arts, but owing to the short time for collecting and packing, necessary for the long voyage, many of the best artists and collectors of works of art are not at all represented at St. Louis.

Among those represented are Aurelio de Figueiredo, B. Calixto, P. Weingartner, Modesto Brocos, Honorio Esteves, A. Delpino, Raphael Frederico, Insley Pacheco, Eliseu Visconti, Girardet and others of equal note, who contributed oil paintings, water-colors, etchings, applied art, etc.

Unfortunately none of the magnificent Works of Art in Sculpture which Brazil possesses could be sent.

The art interests in Brazil are fostered by a school of Fine Arts, belonging to the Federal Government, which offers scholarships, sending the best students of each course to European Art Centres to study, many of them having obtained prizes at the Paris "Salon" and other Art Exhibitions. In this school all kinds of painting, etching, sculpture, architecture, engraving,

MR. J. A. dos SANTOS,
Commissioner in charge of Departm
of Fine Arts.

etc., are taught. Other Art and Trade Schools exist in the country both private and those maintained by the State Governments.

Among the artists, who for mere lack of time could not contribute to Brazil's exhibit at the Louisiana Purchase Exposition, the following may be mentioned, many of them having obtained several prizes at different Expositions:

SCULPTURE—R. Bernardelli, Nicolina de Assis, B. Berna, Correia Lima, Martinelli.

OIL PAINTINGS, ETC.—Pedro Americo, R. Amoedo, Decio Villares, Irmãos Bernardelli, A. Parreiras, B. da Costa, E. Driendl, A. Malevolti, Madruga, Pedro Alexandrino, E. Sá, L. Berna, Calogeras and Belmiro. Victor Meirelles, Almeida Junior, Facchinetti and some others, deceased, were artists of much distinction.

In architectural productions, Morales de Los Rios, Schreiner, Bahiana, Bandeira and C. de Souza have contributed.

In etchings and engravings, A. Bravard, L. Heck, Alfredo Pinheiro, Monteiro Coimbra, etc. There are exhibited in the Brazilian section 184 articles distributed among 6 groups of this department and belonging to 25 exhibitors. The following are the principal exhibitors: Modesto Brocos, A. Delpino, Honorio Esteves, Raphael Frederico, Aurelio de Figueiredo, Insley Pacheco, Oscar P. da Silva, Eliseu Visconti, H. Walder, Pedro Weingartner, A. Girardet, V. Dubugras, Marino del Favero and Ferreira Rangel.

GROUP 9.

Paintings and Drawings—Oil Paintings.

Exhibit No.

Barbosa, Bento, S. Paulo.

1 Portrait.

Brocos, Modesto, Rio de Janeiro.

1a. Portrait of Dr. G. Ramos.
3. Peeling Goiaba Fruit.
4. Southern Cross.
4a. The Old Paina Tree.

Calixto, B., S. Paulo.

4b. Wood Chopper.

Delpino, A., Minas Geraes.

5. Rain on the Mountains.
6. Sunshine in the Forest.
7. Gold-washer.
8. Birth of the Inconfidence.
9. Landscape at Barbacena.
10. Milkman in Costume of Minas.
11. Cross of the Souls; a country residence at Barbacena.
12. Holy Lake.
13. Youthful Artist.
14. Evening on the Farm.
15. Ocean Scene.
16. House where Santos Dumont was born.
17. Wood Hauler in Costume of Minas.
18. Panorama of City of Marianna, State of Minas.

Esteves, H., Minas Geraes.

19. Horse's Head (Brazilian breed).
20. View of River das Velhas near Sabará Station.

Exhibit No.

21. Twilight at Honorio Bicalho.
22. Holy Lake, State of Minas.
23. "Here I am."
24. A Convalescent.
25. Manganese Ore Mining.
26. Gap above Tombadouro Falls.
27. Brazilian Wood Haulers.
28. Manganese Ore Mining.
29. Sunrise in Ouro-Preto.
30. Painting Clay Deposits.
31. A Tipsy Negress.
32. Office of the Belgian Manganese Mining Company.
33. Fowls' Playing Ground.
34. Fowls' Playing Ground.
35. Ancient Palace of Government, State of Minas.
36. Holy Lake Village.
37. Residence of the late Dr. Lund at Holy Lake.
38. Overflow of the Holy Lake.
39. Gathering Grapes in the State of Minas.
40. House and Lands of the Auriferous Co. at H. Bicalho, Station of the Brazil Central Railroad.
42. A Tract of the Boa Vista Park, Residence of the late Emperor D. Pedro II.
43. St. Joseph's Hill at Ouro-Preto.
44. Sunrise in Bello Horizonte.
45. A Part of Sabará Great Bridge over the River das Velhas (built by Engineer Santos Dumont, father of the great Aeronaut).
46. A Country Cooking Range.
47. House where the Minas Revolutionists were assembled in 1790.

Exhibit
No.

48. Canga Heights between Inficionado and Agua Quente Hill.
49. General Panorama of Bello Horizonte—Old Curral d'El Rey, before the construction of present city.
50. Panorama of Bello Horizonte, showing the famous Piedade Mountains, Sabará Street and old Parochial Church.
51. Great Fountain at the Savings Bank Square and the Arts and Trades Lyceum.
52. Miniature of the City of Ouro Preto, showing the Church of "Our Lady of the Rosario."
53. A Child's Fancy Dress.
53a. Parochial Church at Bello Horizonte.
53b. Portrait Head of Man.

Frederico, Raphael, **S. Paulo.**

54. Concert in the Open Air.
54a. Landscape and Girl.
55. Amateur Collector.
56. Rondó in 'la major.
57. Interior of an Artist's Studio.
58. Watering the Vines.
59. After the Reading.
60. Near the Altar.
61. Interior Household Scene.

Figueiredo, A., **Rio de Janeiro.**

62. Leme Fort.
63. Sunset on the Beach.
64. Summer Evening.
65. Corcovado (Hump-back) Mountain.
66. Sensational Crime.
67. Rhapsody of the Waves.
68. Panorama of Serra de Petropolis.
69. Copacabana.
70. Babylonia Mountain
71. Rocks.
72. Valley of the Tijuca Mountain.
73. Bay of Botafogo.
74. Peak of Tijuca Mountain.
75. Avis Rara (Artist's Inspiration).
75a. Youth's Dream.

Figueiredo, Dr. A. G., **Amazonas.**

76. View of the city of Manaos.

Mee, M., **S. Paulo.**

76a Fruit.
76b. Orchids.
76c. Orchids.
76d. Tomatoes.

Pacheco, Insley, **Rio de Janeiro.**

77. Cataract of Paulo Affonso.
78. Landscape.
79. Landscape.
80. Marine.
81. Marine.
82. Marine.
83. Marine.
84. Marine.

Exhibit
No.

Papf, E., **S. Paulo.**

84a. Orchids.

Ribeiro, L., **Minas Geraes.**

85. Brazilian Cruiser on Ocean at Night.
86. Steamship "Kronprinz Wilhelm."
87. American Battleships in Rio de Janeiro Harbor. (Saluting.)

Silva, Oscar P. da, **S. Paulo.**

87a. A Mother holding Child.

Steckel, F. A., **Minas Geraes.**

88. A Stone Quarry.
89. Panorama of the Morro Velho.
89a. A Suburban Residence.

Visconti, E., **Rio de Janeiro.**

90. Bust of Man.
91. A Convalescent.
92. Mystic Dream.
93. Pedro Alvares Cabral.
94. S. Sebastião.

Walder, Henry, **Rio de Janeiro.**

95. Odontoglossum Grande.
96. Cattleya Gigans; Warocqueana; Amethystina; Rex de O'Brien.
97. Cattleya Hordyano Cardeniana; Cattleya Dowiana; Cattleya Leopoldo II; Cattleya Walkeriana.
98. Cattleya Hordyano Luciani; Mossiae Amoena; Oncidium Krameranum; Oncidium Lamelligerum.
99. Lovelia Elegans; Lovelia Glauca.
100. Lutia Purpureum; Insleay.
101. Miltonia Morelina; Miltonia Purpurata; Miltonia Vexillania; Miltonia Alva.
102. Cattleya Kimalliana; Cattleya Mendeli; Cattleya Labiata; Cattleya Cupidon Autumnalis.

Weingartner, P., **Rio Grande do Sul.**

103. Change of Fortune.
103a. The Harvest.
103b. The Cock Fight.
103c. A Marriage at Anticoli.

Pastels and Other Work.

Delpino, A., **Minas Geraes.**

109. Mother caressing Child. Pastel drawing.
110. Ox Cart Driver. Pastel drawing.
111. Portrait of Mel. Joaquim de Macedo. Pastel drawing.
112. Itacolomy Mountains.

Esteves, H., **Minas Geraes.**

113. A cottage at Villa Bressane.
114. Innocent Sleep. Pencil drawing.
115 Ancient House at Bello Horizonte.
115a. An old Farm House.

116. St. Joseph's Procession.
117. Flowers. Colored Crayon.
117a. President Floriano. Pastel.
117b. Victor Emmanuel. Pastel.
117c. Dr. P. G. Lund. Pastel

Pacheco, Insley, **Rio de Janeiro.**
118. Marine. Gouache.
119. Marine. Gouache.
120. Marine. Gouache.
121. Marine. Gouache.
122. Marine. Gouache.

Schlatter, Fernando, **Rio Grande do Sul.**
123. View of City of Porto Alegre.

Visconti, E., **Rio de Janeiro.**
124. Nude Woman. Crayon drawing.
125. Bust of Woman. Crayon drawing.
126. Woman in Repose. Crayon drawing.
127. Figures of Children. Crayon Drawing.
128. Bust of Woman. Crayon drawing.

GROUP 10.

Engravings and Lithographs.

Brocos, Modesto, **Rio de Janeiro.**
128a. Three etchings in one frame:
(a) Marshall Floriano Peixoto.
(b) Rodolpho Bernardelli.
(c) Late Dom Pedro II.
128b. Three etchings in one frame.
128c. Frame with etchings: Portraits of eminent Brazilian Citizens.

GROUP 11.

Sculpture.

Exhibit No.

Favero, Marino del, & Bros., **S. Paulo.**
128d. Christ on the Cross of Calvary. Wood Carving.

Girardet, A. G., **Rio de Janeiro.**
129. Case containing bronze and aluminum medals and cameos.
130. Collection of large bronze medallions.
131. Collection of large plaster medallions.

Rangel, A. O. F., **S. Paulo.**
131a. Coffee Branch. Wood carving.

Zani, Amadeu, **S. Paulo.**
131b. Ave Maria. Bas relief in plaster.

GROUP 12.

Architecture.

Dubugras, V., **S. Paulo.**

131c. Perspective View of Design for Church. Water color.
131d. Perspective View of Design for Town Hall. Water color.
131e. Five Views of House. Photographs.
131f. Five Views of Interior of House. Photographs.
131g. Five Views of Church. Photographs.
131h. Seven Views of Town Hall. Photographs.

GROUP 13.

Loan Collection.

131i. Madonna. Very old. Loaned by Dr. Augusto Mario, Minas Geraes.

Musi, A. (deceased).
131j, 131k, 131l. Three water colors, representing festival scenes. Loaned by Col. Ferreira Penna de Azevedo.

GROUP 14.

Original Objects of Art Workmanship.

Visconti, E., **Rio de Janeiro.**
Water colors:
132. Wall paper design.
133. Pitcher design.
134. Vase design.
135. Lace design.
136. Design for table.
137. Wall paper design.
138. Wall paper frieze design.
139. Wall paper design.
140. Wall paper design.
141. Wall paper design.
142. Wall paper design.
143. Imitation stained glass design.
144. Plate design.
145. Vase design.
146. Wall paper design.
147. Design for an allegorical picture.
148. Portiere drapery design.
149. Plate design.
150. Wall paper design.
151. Vase design.
152. Design for printed drapery.
153. Design for dyeing cloth.
154. Design for embroidery.
155. Design for pattern of cloth.
156. Table chandelier design (electric).
157. Wall paper design.
Ceramics:
158. Vase.
159. Vase.
160. Vase.
161. Vase.
162. Vase.
163. Jar.
164. Jar.
165. Jar.
166. Jar.
166a. Jar.
167. Platter.

1—Exterior View. 2—Interior View.

BRAZILIAN SECTION

DEPARTMENT OF LIBERAL ARTS

GROUPS 15 TO 27

THE Department of Liberal Arts is one that comprises a great variety of specimens and which tends to show the degree of advancement of a country. In this department Brazil is well represented in nearly all the groups of the official classification and the display is a valuable and interesting one. With the exception of instruments, machinery and apparatus used in the various arts, which can not yet be manufactured in the country on account of lack of coal, Brazil makes a conspicuous display of processes and products of Liberal Arts.

In typography, engraving and other printing and graphical processes, photography, maps, books, newspapers, book-binding, albums, drawings, musical publications, etc., there is a great variety of exhibits which give a good idea of the high degree of perfection reached in these different classes of work.

A few instruments, such as scales, areodosimeter, numismatic albums and catalogues, etc., dental surgery and preparations, etc., are represented in groups 19 and 20.

Group 21 – Musical Instruments. This group is one of the best represented in this Department. The metal, string and wind instruments displayed by all of the exhibitors show the highest grade of workmanship, the excellent quality of material used and the artistic taste of the manufacturers.

In the chemical and pharmaceutical arts the display is an exceptionally good one. Raw materials of pharmacy, drugs, simple and compounded, matches, different kinds of wax, soaps, candles, glycerine, vegetable essences, oils, perfumes, pharmaceutical products, salts, glue, blacking, filters, varnish, etc., are exhibited in profusion.

DR. GRAÇA COUTO.
Commissioner in charge of Departm[ent] of Liberal Arts.

In Civil and Military Engineering, Public Works and Architectural Engineering groups are found samples of natural and artificial building materials, models, plans, and drawings for Public Works and buildings, improvements of cities, rivers and harbors, railroads, models of stairs, photographs, reports and publications on processes of preparation and use of materials and constructions of work, etc.

It would be difficult to single out the best exhibit among so many good ones.

GROUP 15.

Typography—Various Printing Processes.

Bevilacqua & Co., E., Rio de Janeiro.
SAMPLES OF ENGRAVING.
One of the most completely equipped shops for graphical work.

Imprensa Nacional, Rio de Janeiro.
SAMPLES OF TYPOGRAPHIC WORK, ENGRAVINGS, LITHOGRAPHIC WORK, TYPES, PLATES, CASTINGS, ETC., COPIES OF PHOTOGRAPHS, ETC.

Ribeiro & Co., Rio de Janeiro.
COLLECTION OF POSTAL CARDS.

Silva & Co., M., Amazonas.
ENGRAVINGS.
SAMPLES OF TYPOGRAPHIC WORK.

Schmidt, Jorge, Rio de Janeiro.
MONTHLY ILLUSTRATED REVIEW "KOSMOS."
A splendid specimen of this class of work, done in Mr. Schmidt's shop.

GROUP 16.

Photography.

Agricultura, Sec. da, Bahia.
PHOTOGRAPHS.

Caxias, Intendencia de, Rio Grande do Sul.
PHOTOGRAPHS OF CITY.

Calegaria, Virgilio, Rio Grande do Sul.
PHOTOGRAPHS.

Conde de Prates, S. Paulo.
ALBUM OF PHOTOGRAPHS.

Cunha, Gaudencio, Maranhão.
PHOTOGRAPHS.

Com. de Curityba, Paraná.
PHOTOGRAPHS.

Com. do Estado, Matto Grosso.
PHOTOGRAPHS.

D. Pedrito, C. Municipal de, Rio Grande do Sul.
PHOTOGRAPHS OF CITY.

Ferrez, Marc, Rio de Janeiro.
PHOTOGRAPHS.
One of the best photographers in the country, specially for outdoor work and large photographs.

Governo do Estado, Rio Grande do Sul.
PHOTOGRAPHS.

Garibaldi, Intendencia de, Rio Grande do Sul.
PHOTOGRAPHS OF CITY.

Gaensly, Guilherme, S. Paulo.
PHOTOGRAPH ALBUM.

Interior, Sec. do, Minas Geraes.
PHOTOGRAPHS.

Jahú, C. Municipal de, S. Paulo.
ALBUM OF PHOTOGRAPHIC VIEWS.

Mogyana, Comp. E. F., S. Paulo.
ALBUM OF PHOTOGRAPHS.

Moncorvo Filho, Dr., Rio de Janeiro.
ALBUM OF PHOTOGRAPHS.

Nickelsen, Julius, S. Paulo.
PHOTOGRAPHS.

Nascimento, Asdrubal, S. Paulo.
PHOTOGRAPHS.

Porto, Pedro, Rio Grande do Sul.
PHOTOGRAPHS.

Porto Alegre, Municipio de, Rio Grande do Sul.
PHOTOGRAPHS.

P. Alegre, C. de Bombeiros, Rio Grande do Sul.
PHOTOGRAPHS.

Paes de Barros, Col. A. P., Matto Grosso.
PHOTOGRAPHS.

Pereira, Gervasio A., Rio Grande do Sul.
PHOTOGRAPHS.

Pacheco, J. Insley, Rio de Janeiro.
PHOTOGRAPHIC WORK.
Mr. Pacheco has one of the best equipped studios in the country, where the most perfect and varied work in photography is done.

Sarracini, João, S. Paulo.
A very good and large photograph of Santos Dumont, the well-known aeronaut.

S. J. Montenegro, Intendencia de, Rio Grande do Sul.
PHOTOGRAPHS OF CITY.

S. Jeronymo, E. F. e Minas de, Rio Grande do Sul.
PHOTOGRAPHS.

Silva, Pedro Glz. da, Bahia.
PHOTOGRAPHS.

Soucassaux, Francisco, Minas Geraes.
PHOTOGRAPHS SHOWING EFFECTS OF LIGHT AND LANDSCAPE SCENE.

Santos, D. M. C. da Cunha, Rio de Janeiro.
THREE PAINTINGS IN OIL.
Mrs. Santos is a distinguished amateur painter.

Volk, H. A., Paraná.
PHOTOGRAPHS.

Vieira, Valerio, S. Paulo.
PHOTOGRAPHS.

Ziul, Rio Grande do Sul.
PHOTOGRAPHS.

GROUP 17.

Books and Publications—Bookbinding.

Alves & Co., F., Rio de Janeiro.
BOOKS.
This book store is well known for the splendid supply of text books it edits and always has on hand.

Archivo Publico, Pará.
BOOKS.

Bello, M. de Faria, Minas Geraes.
BOOK ON DISTANCES IN THE STATE.

Bevilacqua, D. Amelia de F., Rio de Janeiro.
BOOK, "ALCYONE."

Bibliotheca Nacional, Rio de Janeiro.
BOOKS, BULLETINS, CATALOGUES, TEXT BOOKS AND DICTIONARIES.
A valuable collection of 34 interesting exhibits.

Barcellos & Co., L. P., Rio Grande do Sul.
BOOKS AND SAMPLES OF BOOKBINDING.

Briones, Caetano, Amazonas.
MUSICAL PUBLICATIONS.

Brito, Paulino de, Amazonas.
BOOKS.

Buhnaeds & Co., M. L., S. Paulo.
BOOKS AND SAMPLES OF BOOKBINDING.

Bevilacqua & Co., Rio de Janeiro.
MUSICAL PUBLICATIONS.

Com. da Exposição P. de S. Paulo, S. Paulo.
PUBLICATIONS, COLLECTION OF NEWSPAPERS AND PERIODICALS.

Commissão da Imprensa, S. Paulo.
COLLECTION OF NEWSPAPERS.

Craig & Martins, S. Paulo.
ALBUM.

Com. do Estado, Matto Grosso.
BOOKS, PUBLICATIONS AND NEWSPAPERS.

Carvalho, Antonio, Pará.
BOOKS.

Costa, Candido, Pará
BOOKS.

Campos, Dr. H. Lopes de, Amazonas.
BOOKS.

Domenico, Miccuci, S. Paulo.
BOOK BINDING.

Duprat & Co., S. Paulo.
BOOKS, SAMPLES OF BOOKBINDING.
The oldest book-store and printing establishment in the State of S. Paulo.

Echenique Irmaõs & Co., Rio Grande do Sul.
BOOKS AND PUBLICATIONS.

Frias & Co., Maranhão.
BOOKS.

Governo de Estado, Amazonas.
BOOKS AND NEWSPAPERS.

Governo do Estado, Minas Geraes.
PUBLICATION.

Governo do Estado, Rio Grande do Sul.
BOOKS.

Gaensley & Co., S. Paulo.
BOOKS.

Garnier, H., Rio de Janeiro.
BOOKS.
The Garnier book store is well known all over Brazil on account of its complete supply of books on hand on all subjects.

Gerke, Carlos, S. Paulo.
BOOKBINDING.

Gonçalves, Dr. A. C. Lopes, Amazonas.
BOOKS.

Humphrey, George, Amazonas.
BOOKS.

Imprensa Nacional, Rio de Janeiro.
BOOKS, REPORTS. ALBUMS, MAPS, PUBLICATIONS, BLANKBOOKS, SAMPLES OF BOOKBINDING, ETC.
A varied collection showing the different kinds of typographic work done in the official printing office of Brazil.

Imprensa do Estado, Rio Grande do Sul.
BOOKS.

Interior, Sec. do, Minas Geraes.
BOOKS.

Krahe & Co., Rio Grande do Sul.
BLANK BOOKS, SAMPLES OF BOOKBINDING.

Laemmert & Co., Rio de Janeiro.
SAMPLFS OF BOOKBINDING.
BOOKS.

One of the oldest and most reliable booksellers and editors of Brazil.

Lima, Dr. Eladio, Pará.
BOOKS.

Medeiros & Co., S. Paulo.
YEAR BOOK OF THE STATE.

Ministerio do Interior, Rio de Janeiro.
VARIOUS PUBLICATIONS.

Moseller, Pedro, Matto Grosso.
NEWSPAPERS.

Marajó, Barão de, Amazonas.
BOOKS.

Moncorvo Filho, Dr., Rio de Janeiro.
BOOKS.

Moura, Ignacio, Pará
BOOKS.

Mattoso, Ernesto, Amazonas.
BOOKS.

Nobre Vianna, A. D., Pará.
BOOKS.

Polytechnico Brazileiro, Inst., Rio de Janeiro.
13 VOLUMES OF THE REVIEW PUBLISHED BY THE INSTITUTE.

Penna, Ferreira, Pará.
BOOKS.

Pires, D. Aurea, Rio de Janeiro.
BOOK, "INDIANA" (POEM).

Porto Alegre, C. Municipal de, Rio Grande do Sul.
BOOKS.

Quarto Districto Agronomico, S. Paulo.
BOOKS.

Rabello, F., Maranhão.
BOOKS.

Revista de Engenharia, Rio de Janeiro.
COLLECTION OF REVIEWS.

Rosa, Ferreira da, Rio de Janeiro.
BOOKS ON RIO DE JANEIRO.

Roberti, Luiz, Rio Grande do Sul.
MUSICAL PUBLICATION.

Rottermund, W., Rio Grande do Sul.
BOOKS.

Rosa, Henrique Sta. Pará.
BOOKS.

Rodrigues, Dr. Barbosa, Rio de Janeiro.
BOOK, "PALMARUM SERTORIUM."

Dr. B. Rodrigues is a well-known botanist, who has devoted himself to the study of the palm trees of Brazil, and the above publication is the result of his work.

Rocha & Co., Annibal, Paraná.
BOOKS.

Soc. Geographica do Rio de Janeiro, Rio de Janeiro.
5 VOLUMES OF THE REVIEW PUBLISHED BY THIS ASSOCIATION.

Santos, Dr. José Americo dos, Rio de Janeiro.
BOOKS.

Santos, D. M. C. da Cunha, Rio de Janeiro.
BOOK, "PAINEIS."

Among the literary women of Brazil Mrs. Santos occupies a prominent place.

Secretaria da Agricultura, S. Paulo.
PUBLICATIONS.

Souza & Barros, Rio Grande do Sul.
BOOK. SAMPLES OF BOOKBINDING.

Sertãosinho, C. Municipal de, S. Paulo.
POSTAL CARDS.

Schmidt, Francisco, S. Paulo.
POSTAL CARDS.

Schmidt, Jorge, Rio de Janeiro.
"KOSMOS," MONTHLY ILLUSTRATED PUBLICATION.

One of the many good ones of Brazil.

Siqueira, Avelino de, Matto Grosso.
BOOKS.

Sant Anna Nery, Barão de, Amazonas.
BOOKS.

Silva, Dr. Ferreira da, Rio de Janeiro.
BOOKS.

Senna, Dr. Nelson de, Minas Geraes.
BOOK, "CONTOS SERTANEJOS."

Seixas & Co., J. Parahyba.
BOOKS.

Souza, Antonio Monteiro de, Amazonas.
BOOKS.

Souza, A. O. Araujo, Amazonas.
BOOKS.

Silvio Senior, Amazonas.
BOOKS.

Tapajóz, Torquato, Amazonas.
BOOKS—ON THE BOUNDARY LINE OF THE STATE.

Vanorden & Co., S. Paulo.
BOOK—SAMPLE OF BOOK BINDING.

Vaz, Thaumaturgo, Amazonas.
BOOKS.

Vianna, Arthur, Amazonas.
BOOKS.

Verissimo, José, Amazonas.
BOOKS.

GROUP 18.

Maps and Apparatus for Geography, Cosmography, Topography.

Alves & Co., F., Rio de Janeiro.
GEOGRAPHICAL MAPS AND ATLASES.

Agricultura, Sec. da, Bahia.
MAP.

Agricultura, Sec. da, S. Paulo.
MAPS.

Agricultura, Sec. da, Rio de Janeiro.
MAP OF BRAZIL.

This large map shows the extent of the country, its coast, fluvial navigation, its railroad systems, etc. Its frame is a splendid piece of work.

Com. Geographica, Minas Geraes.
MAP.
Ten sheets of the map of the State.

Governo do Estado, Sta. Catharina.
MAP OF STATE.

Laemert & Co., Rio de Janeiro.
MAPS.

Moura, Dr. Gentil de Assis, S. Paulo.
MAP OF THE CITY OF S. PAULO.

Obras Publicas, Inspectoria de, Rio Grande do Sul.
MAP.

Payer, Pedro, Amazonas.
MAP.

Prefeitura Municipal, Rio de Janeiro.
MAPS.

Porto Alegre, C. M. de, Rio Grande do Sul.
MAPS.

Rosa, Ferreira da, Rio de Janeiro.
FIVE MAPS OF RIO DE JANEIRO.

Rep. de Estatistica, Amazonas.
MAPS.

GROUP 19.

Instruments of Precision, Philosophical Apparatus, etc., Coins and Medals.

Crescenzo, Januario de, S. Paulo.
SCALES.

Felisola, V., S. Paulo.
SCALES.

Hubner, J., Amazonas.
ALBUM OF NUMISMATIC COLLECTION.

Knack & Filhos, G., S. Paulo.
DECIMAL SCALES.

Petrone, Potito, S. Paulo.
TAILORS' SQUARE.

Ramos, Bernardo, Amazonas.
CATALOGUE OF NUMISMATIC COLLECTION.

GROUP 20.

Medicine and Surgery.

Mattos, Dr. Silvino de, Rio de Janeiro.
SAMPLES OF DENTAL WORK.

Schóeler, Reinaldo, Rio Grande do Sul.
DENTAL WORK.

GROUP 21.

Musical Instruments.

Couceiro, J. dos Santos, Rio de Janeiro.
STRING MUSICAL INSTRUMENTS.

For artistic qualities and taste, no other work excels that produced in Mr. Couceiro's factory. It compares favorably with the best of foreign makers.

Cypriani, José, Rio Grande do Sul.
STRING MUSICAL INSTRUMENTS IN CASES.

The same can be said of those made by Mr. José Cypriani.

D'Alô & Irmãos, Zacarias, S. Paulo.
PERCUSSION MUSICAL INSTRUMENTS.

Diniz, Arthur, S. Paulo
GUITARS.

Felhauer, Alberto, Rio Grande do Sul.
STRING MUSICAL INSTRUMENTS.

Mr. Felhauer's instruments rank among the finest made in Brazil, not only with regard to musical qualities and decorative taste, but also as to the qualities of material used.

Guerra, Fernando, S. Paulo.
ACCORDIONS.

Giudici, Virgilio, S. Paulo.
STRING MUSICAL INSTRUMENTS.

Lorenço, Fratelli, S. Paulo.
STRING INSTRUMENTS.

Marsaioli, Luiz, S. Paulo.
ACCORDIONS.

Pistorezi, Francisco, S. Paulo.
STRING MUSICAL INSTRUMENTS.

Scavoni & Co., S. Paulo.
WIND MUSICAL INSTRUMENTS (METALLIC).

GROUP 23.

Chemical and Pharmaceutical Arts.

Abreu Sobrinho & Co., Rio de Janeiro.
PHARMACEUTICAL PREPARATIONS.

Aguiar, Freire de, Rio de Janeiro.
192 SAMPLES OF PHARMACEUTICAL PRODUCTS.

This is one of the best Pharmaceutical Laboratories in the whole country.

Alvaro Alberto da Silva, Rio de Janeiro.
DRUGS.

Azevedo, Luiz Cardoso de, Rio Grande do Sul.
MEDICAL PREPARATIONS.

Azevedo, Alberto, Amazonas.
MEDICAL PREPARATIONS.

Araujo, V. Gomes de, Amazonas.
MEDICAL PREPARATIONS.

Brandão, Francisco P., Rio de Janeiro.
PHARMACEUTICAL PREPARATIONS.

Bogaert & Co., S. Paulo.
SOAPS.
PERFUMERY.

Barros, Dario, Rio Grande do Sul.
MEDICAL PREPARATIONS.

Barcellos, A., Rio Grande do Sul.
MEDICATED AND TOILET SOAPS.

Bartholomeu & Co., Pernambuco.
PHARMACEUTICAL PREPARATIONS.

Brazil, Miguel, Rio Grande do Sul.
MEDICAL PREPARATIONS.

Barata, Sarmento, Rio Grande do Sul.
DRUGS.

Berthaud, Ch., Minas Geraes.
CHEMICAL PREPARATIONS.

Brito, Gracindo de, Bahia.
MEDICAL PREPARATION.

Brito & Co., S. Paulo.
MATCHES.

Boutim, Otto, Paraná.
GLUE.

Carvalho & Co., Alfredo de, Rio de Janeiro.
PHARMACEUTICAL PREPARATIONS.

Certain, A. Guimarães, Rio de Janeiro.
PHARMACEUTICAL PREPARATIONS FOR THE MOUTH AND TEETH.

Camello, Honor., Rio Grande do Sul.
MEDICAL PREPARATION.

Camillo & Oliveira, Antonio, Rio Grande do Sul.
DRUGS.

Cruz & Co., Pernambuco.
PHARMACEUTICAL PREPARATIONS.

Carlos, Luiz, S. Paulo.
PHARMACEUTICAL PREPARATIONS.

Camille & Co., Levy, Amazonas.
MEDICAL PREPARATIONS.

Costa, P. C. Correia da Matto Grosso.
PHARMACEUTICAL PREPARATIONS.

Cunha, Dr. Alvaro A. da, Rio de Janeiro.
AREODOSIMETER FOR THE EXAMINATION OF URINE.

Calvanese, Raffaele, S. Paulo.
MEDICAL PREPARATIONS.

Carvalho, Agrario B. de, Bahia.
PHARMACEUTICAL PREPARATIONS.

Camillo & Genro, Antonio, Minas Geraes.
MEDICAL PREPARATIONS.

Calazans, Dr. Julio de, Bahia.
PHARMACEUTICAL PREPARATIONS.

Cibillis, Fabrica, Matto Grosso.
SOAP.

Daudt & Freitas, Rio Grande do Sul.
MEDICAL PREPARATIONS.

Dapelo & Recco, Nicolao, Rio Grande do Sul.
MEDICAL PREPARATIONS.

Del Claro, Samuel, Paraná.
GLUE.

Dutra, Dr. José Fialho, Rio Grande do Sul.
MEDICAL PREPARATIONS.

Duchein, Victor, S. Paulo.
FILTERS.

Drogas e Productos Chimicos, Comp., Pernambuco.
MEDICAL PREPARATIONS.

Dias, José Esteves, Maranhão.
MEDICAL PREPARATIONS.

Ebling, Leopoldo, Rio Grande do Sul.
GLUE.

Eugenio & Co., Alfredo, Paraná.
MATCHES.

Ferreira & Co., Anjos, Paraná.
PHARMACEUTICAL PREPARATIONS.

Fischel, Dr. Victor, Rio Grande do Sul.
MEDICAL PREPARATIONS AND SOAP.

Franco & Co., Souza, Rio Grande do Sul.
MEDICAL PREPARATIONS.

Fonseca, Collect A., Rio de Janeiro.
PHARMACEUTICAL PREPARATIONS.

Figueiredo, B. de Senna, Minas Geraes.
PHARMACEUTICAL PREPARATIONS.

Ferraz, F. J. da Silva, Amazonas.
MEDICAL PREPARATIONS.

Flores, Dr. Nogueira, Rio Grande do Sul.
DRUGS.

Giffoni & Co., Francisco, Rio de Janeiro.
PHARMACEUTICAL PREPARATIONS.

Garcia Nogueira & Co., S. Paulo.
CANDLES.

Graitz, A., Paraná.
CANDLES AND SOAP.

Hurlimann, F., Paraná.
MATCHES.

Indio, Pharmacia do, Rio Grande do Sul.
MEDICAL PREPARATIONS.

Isola, Joaquim, S. Paulo.
MEDICAL WASHES.

Jung & Co., Rio Grande do Sul.
MATCHES, 7 BRANDS.

Koeler, Nicolao, Rio Grande do Sul.
DRUGS.

Köhler, Luiz, Rio Grande do Sul.
PHARMACEUTICAL AND HOMEOPATHIC PREPARATIONS.

Kahn Freres, S. Paulo.
GLUE.

Lopes & Faral, Rio Grande do Sul.
MEDICAL PREPARATIONS.

Laan, Dr. Van Der, Rio Grande do Sul.
HOMEOPATHIC PREPARATIONS.

Lagunilha, Joaquim, Rio Grande do Sul.
MEDICAL PREPARATIONS.

Leivas Reis & Co., Rio Grande do Sul.
PHARMACEUTICAL PREPARATIONS.

Lobosco, Vicente Romano, Minas Geraes.
PHARMACEUTICAL PREPARATIONS.

Lopp, Pedro, Rio Grande do Sul.
MEDICAL PREPARATIONS.

Luz Stearica, Comp., Rio de Janeiro.
GLYCERINE AND CANDLES.
The most important factory of its kind in Brazil.

Madeira, Eduardo, S. Paulo.
PERFUMERY.

Mayer Junior, João, Rio Grande do Sul.
MEDICAL PREPARATIONS.

Mattos, J. J. M. de, Rio Grande do Sul.
SHOE POLISH.

Mink & Co., Jacob, Rio Grande do Sul.
TOILET SOAPS.

Moojen, J. G., Rio Grande do Sul.
MEDICAL PREPARATIONS.

Monza, Cecilio, Rio Grande do Sul.
MEDICAL PREPARATIONS.

Meissner, Carlos, S. Paulo.
DRUGS.

Madureira, Antero de P., S. Paulo.
DRUGS.

Martin & Co., C., S. Paulo.
DRUGS.

Monteiro, F. A., Amazonas.
DRUGS.

Mendes, Luiz C. de Arruda, S. Paulo.
DRUGS.

Marques, Augusto Cezar, Maranhão.
PHARMACEUTICAL PREPARATIONS.

Mattos & Irmãos, João Vital de, Maranhão.
MEDICAL PREPARATIONS.

Nocetti, Egydio, Sta. Catharina.
VARNISH.

Nobre, Dr. J. M. Argollo, Bahia.
MEDICAL PREPARATIONS.

Oliveira, Luiz Cardoso de, Rio Grande do Sul.
MEDICAL PREPARATIONS.

Olsmann, H., Paraná.
GLUE.

Oscar & Carvalho, Paraná.
GLUE.

Oliveira, Domingos José, Rio Grande do Sul.
OILS.

Pizarro, Drogaria, Rio de Janeiro.
PHARMACEUTICAL PREPARATIONS AND SOAPS.

Pessôa, A., Pará.
MEDICAL PREPARATIONS.

Pasquier & Fischer, Rio Grande do Sul.
MEDICAL PREPARATIONS AND FILTERS.

Pereira, Hermes de Souza, Pernambuco.
PHARMACEUTICAL PREPARATIONS.

Pahl, Luiz, Sta. Catharina.
CHEMICAL PRODUCTS.

Prates & Guimarães, Minas Geraes.
SOAPS AND PERFUMERY.

Passos, Dr. Brito, Maranhão.
SOAPS AND OILS.

Palhano, Anysio, Maranhão.
MEDICAL PREPARATIONS.

Queiroz & Co., L. de, S. Paulo.
DRUGS.

Ribeiro & Co., José Pedro, Mahanhão.
DRUGS.

Reichert Irmãos, S. Paulo.
SOAPS.

Rocha, J. Constantino da, Rio Grande do Sul.
MEDICAL PREPARATIONS.

Rocha e Remião, Rio Grande do Sul.
MEDICAL PREPARATIONS.

Rocha, José Victorino da, Rio Grande do Sul.
MEDICAL PREPARATIONS.

Rocco, Stefano, Rio Grande do Sul.
MEDICAL PREPARATIONS.

Roxo, A. G., S. Paulo.
DRUGS.

Rocha, Antero, Minas Geraes.
MEDICAL PREPARATIONS.

Rouquayrol & Co., H., Pernambuco.
DRUGS, PHARMACEUTICAL PREPARATIONS.

Rapozo, Alpheu, Pernambuco.
PHARMACEUTICAL PREPARATIONS.

Rabello & Filhos, Antonio, Parahyba.
PHARMACEUTICAL PREPARATIONS.

Salerio, Dr. José, S. Paulo.
PHARMACEUTICAL PREPARATIONS.

Silva, Paranhos & Co., Rio de Janeiro.
PASTES AND WAXES.

Schroeder & Co., Rio Grande do Sul.
MEDICAL PREPARATIONS.

Santos, Pedro Goulart dos., Rio Grande do Sul.
MEDICAL PREPARATIONS.

Santos, Antonio Maria dos., Rio Grande do Sul.
PHOSPHATINA.

School of Pharmacy, S. Paulo.
DRUGS.

Silva, João, Rio Grande do Sul.
MEDICAL PREPARATIONS.

Souza Soares, J. A., de, Rio Grande do Sul.
HOMEOPATHIC PREPARATIONS.

Scaciota, Raphael, S. Paulo.
DRUGS.

Serpa, Floriano, Bahia.
PHARMACEUTICAL PREPARATIONS.

Simoni, Paulo, Minas Geraes.
MEDICAL PREPARATIONS.

Sallem, M. A., Rio Grande do Sul.
PREPARATIONS FOR THE MOUTH.

Samico, Eugenio, Pernambuco.
PERFUMES, SOAPS AND TOILET WATERS.

União, Pharmacia, Rio Grande do Sul.
PHARMACEUTICAL PREPARATIONS.

Voight, Adolpho, Rio Grande do Sul.
OILS, SOAPS AND MEDICAL PREPARATIONS.

Withers, Henrique, Paraná.
SOAPS.

GROUP 24.

Manufacture of Paper.

Camargo Freitas & Co., Paraná.
PAPER AND CARD BOARD.

David & Co., Garcia, Rio de Janeiro.
WALL PAPER.

Gertum & Co., Hugo, Rio Grande do Sul.
PAPER.

Sturlini, Narciso, S. Paulo.
PASTE BOARD.

GROUP 25.

Civil and Military Engineering.

Cunha & Co., Pernambuco.
LIME AND CEMENT.

Commissão de S. Francisco, Sta. Catharina.
LIME AND SHELLS.

Companhia Melhoramentos, S. Paulo.
LIME.

Manaos Harbor Co., Amazonas.
PHOTOGRAPHS.

This company is building important docks and warehouses at this port on the Amazon River.

Moers, Henrique J., Amazonas.
ARTIFICIAL STONE.

Rodovalho, Antonio Prost, S. Paulo.
CEMENT.

Ramos, D. Amelia A. da Silva, Minas Geraes.
LIME.

GROUP 26.

Models, Plans and Designs for Public Works.

Commissão do Estado, Amazonas.
PHOTOGRAPHS.

Governo do Estado, Rio Grande do Sul.

Hyd. Relief Map of Improvements on Guahyba River.

Prefeitura Municipal, Rio de Janeiro.

Plans and Maps for improvements of streets in the old commercial part of the City of Rio de Janeiro. Cadastral map of City of Rio de Janeiro.

Santos, Dr. J. Americo dos, Rio de Janeiro.

Collection of 13 volumes of Engineering Review. Works on Railroad Engineering and water supply.

Secretaria Agricultura, S. Paulo.

Publications.

GROUP 27.

Architectural Engineering.

Azevedo, Dr. Ramos de, S. Paulo.

Album of Architecture.

Showing styles of houses in S. Paulo.

Agricultura, Sec. da, Minas Geraes.

Photographs of Buildings.

Correcção, Casa de, Rio de Janeiro.

Model of Double Spiral Stair Case in Wood.

This work was made in the well equipped carpenter shop of the Penitentiary of Rio de Janeiro, where the prisoners are kept busy learning some trade or art in various shops.

Dubugras, Victor, S. Paulo.

Photographs and Plans of Buildings.

Soucassaux, Francisco, Minas Geraes.

Photographs of Public and Private Buildings.

Streets and parks in Bello Horizonte, and views of the old town.

Sec. da Industria, Amazonas.

Reports and Plans of Buildings.

BRAZILIAN SECTION IN VARIED INDUSTRIES BUILDING.

1—Exterior View of Booth in West Court of Varied Industries Palace. 2-3-4-5-6—Interior Views.

COMMODORE J. C. DE CARVALHO,
Commissioner in charge
of Department of Manufactures.

DEPARTMENT OF MANUFACTURES

GROUPS 28 TO 61

VERY little is manufactured yet in Brazil for exportation and the supply of many articles manufactured there is not even sufficient for the demands of the country. There is, therefore, a very good market for foreign goods and splendid opportunities for the establishment of factories both to supply the home market and for exportation, especially when the fact is taken into consideration that raw material of first-class quality is inexpensive and abundant, that almost all kinds of machinery enter the country free of duty, and that labor is plentiful and cheap.

The following products on exhibition show to a great advantage, the quality of the materials and of the workmanship in the country.

All kinds of cotton, woolen and silk goods of first quality, leather in all its forms, fine shoes and gloves, sets of harness and saddles, straw and felt hats, metal work and hardware, safes, feather-work, laces, embroideries, rugs, carpets, beautiful hammocks, magnificent pieces of furniture, ceramics, china, glassware, clothing, wearing apparel, ladies' and gentlemen's furnishing goods of all kinds, jewelry, fancy goods, goods made of native fibres, trunks and traveling articles, clocks, desks and furnishings, paper, cutlery, brushes and brooms, baskets, fancy articles, stained glass, marble productions, metallic furniture, and many others.

Brazil has not the presumption of competing with foreign countries in this branch of human activity, but feels proud that in some of the goods exhibited the quality and finishing is equal and in some cases superior to that of the same articles of foreign countries. It is only of late years that the agricultural development of the country, the increase of population and other special conditions have brought about the opportunity for the development of the industries and manufactures. A good start has been made and the development of coal mines recently discovered and the utilization of the abundant water power of the country for electric energy will soon remove one of the greatest difficulties and it will not be many years before Brazil will be able to manufacture at home nearly every thing required to supply the demands of the population and for exportation.

MR. EUGENIO DAHNE,
Auxiliary of Commission.

GROUP 28.

Stationery.

Baptista, David, S. Paulo.
WRITING FLUID.

Bunhaeds & Co., M. L., S. Paulo.
ENVELOPES.

Cordeiro, Daniel de Oliveira, S. Paulo.
WRITING FLUID.

Lopes & Faral, Rio Grande do Sul.
WRITING FLUID.

Riedel, H., Rio Grande do Sul.
WRITING FLUID.

Vellozo & Co., Paraná.
WRITING FLUID AND INKS FOR STAMPS.

Vieira & Co., G., S. Paulo.
WRITING FLUID.

GROUP 29.

Cutlery.

Campina Grande, C. M. de, Parahyba.
STEEL POIGNARD.

Meo & Co., Muncio de, S. Paulo.
CUTLERY.

Meo & Co., Domingos de, S. Paulo.
CUTLERY.

Riolffi & Filho, J., Rio Grande do Sul.
GOLD EYE-GLASSES, ETC.

GROUP 31.

Jewelry.

Fehlauer, Alberto, Rio Grande do Sul.
GOLD EYE-GLASSES, ETC.

Jeanselme, Felippe, Rio Grande do Sul.
GOLD AND SILVER JEWELRY WITH STONES (REAL AND IMITATION).

Laydner & Co., R., Rio Grande do Sul.
ARTICLES TRIMMED WITH SILVER.

Rocha & Co., Rio Grande do Sul.
ARTICLES TRIMMED WITH SILVER.

GROUP 32.

Clock and Watch Making.

Kirchkoff, Francisco Carlos, Rio Grande do Sul.
CLOCKS.

This clock was made entirely in the exhibitor's shop.

GROUP 33.

Productions in Marble, Bronze, Cast and Wrought Iron.

Capelli, Adamo, S. Paulo.
MOSAICS IN MARBLE.

Costa, J. Vicente da, Minas Geraes.
ART WORK IN MARBLE.

Freire, J. Candido, Ceará.
OBELISK IN BRONZE.

This is one of the finest shops in Northern Brazil for the construction and repairing of agricultural machines, railroad material, engineering instruments and art work of all kinds, in iron, bronze and other metals.

Hugo, Viuva Gustavo, Rio Grande do Sul.
IRON VASE-STAND.

Varonese & Co., Cezar, Amazonas.
MARBLE OBJECTS.

GROUP 34.

Brushes, Fine Leather Articles, Fancy Articles and Basket Work.

Andrade, D. Elisa U. de, Bahia.
FRUITS IN PASTE BOARD.

Campina Grande, Com. Municipal, Parahyba.
IVORY KNIFE HANDLES.

Fracalanza, Angelo, S. Paulo.
BROOMS AND DUSTERS.

Feira de Sant Anna, Com. M. de, Bahia.
OSTRICH FEATHER DUSTERS.
HORN AND COCO-NUT BOXES.

Jacobsen, Alberto, Rio de Janeiro.
FANCY ARTICLES IN FEATHERS, ETC.

Penitenciaria, Bahia.
COCO-NUT SHELL CALABASHES.
FANCY ARTICLES IN HORN.
HANDLES FOR KNIVES AND FORKS.
BONE CROCHET-NEEDLES AND TOOTH-PICKS.

Petersen, Jorge R., Rio Grande do Sul.
BROOMS.
DUSTERS AND BRUSHES.

One of the best displays in this department is that of the Petersen factory, the best one in the State of Rio Grande do Sul.

Silva, Antonio Agostinho da, Bahia.
FRUITS IN PASTE BOARD.

Selman, D. Gulhermina, Bahia.
WAX FLOWERS.

Stange, Guilherme, Paraná.
BROOMS AND BRUSHES.

Sabatke, Bernardo, Paraná.
BROOMS AND BRUSHES.

Schaitza, Oscar, Rio Grande do Sul.
FINE LEATHER PURSES, ETC.

Venturini & Co., Libero, Rio Grande do Sul.
BROOMS AND PASTE BOARD.

GROUP 35.

Articles for Traveling and for Camping; India Rubber and Gutta Percha Industries.

Couto, Dr. Graça, Maranhão.
HAMMOCK.

Com. do Estado, Maranhão.
HAMMOCK.

Couto, Pedro C. do, Matto Grosso.
HAMMOCK.

Marinho, Manoel Joaquim, Rio de Janeiro.
TRUNKS, HAT-BOXES, SATCHELS, ETC.
This is a first-class exhibit of one of the best factories of Rio. The material is all found and prepared in Brazil.

Moreira & Irmão, Maranhão.
HAMMOCK.

Novis, Dr. Arnaldo, Matto Grosso.
PHOTOGRAPH OF LOOM.
Nearly all the hammocks exhibited from Matto Grosso were manufactured on looms of this style.

Orlando, Vicente, Matto Grosso.
HAMMOCK.

Osorio, Pedro Leite, Matto Grosso.
HAMMOCKS.

Palhano & Passos, Maranhão.
HAMMOCKS.

Rabello, Joaquim, Maranhão.
TRUNK.

Silva e Cunha, D. Generosa, Goyaz.
CROCHET HAMMOCK.

Wanderley, Francisco M., Matto Grosso.
HAMMOCKS.

GROUP 37.

Decoration and Stationary Furniture of Buildings and Dwellings.

André, Francisco, Rio Grande do Sul.
ARTISTIC PICTURE FRAMES.

Boher, Irmãos & Co., Rio de Janeiro.
ARTISTIC DOME IN ZINC.

Correccão, Casa de, Rio Grande do Sul.
PICTURE FRAME.

Cypriani, José, Rio Grande do Sul.
COAT OF ARMS IN WOOD.

Steigleder Sobrinho, Germano, Rio Grande do Sul.
PICTURE FRAME.
ARTISTIC DOOR AND WINDOW FRAMES.

GROUP 38.

Office and Household Furniture.

Arbós & Salvador, Rio Grande do Sul.
ARTISTIC FURNITURE.

Auler & Co., Rio de Janeiro.
One of the most important factories manufacturing artistic furniture in the whole country.

Agricultura, Secretaria da, S. Paulo.
FURNITURE.

Artes & Officios, Lyceo de, S. Paulo.
FURNITURE.

Coelho da Rocha & Co., S. Paulo.
SHOW CASE.

Ferreira Junior & Saraiva, S. Paulo.
SHOW CASE.

Gruber e Filho, Christiano F., Rio Grande do Sul.
ARTISTIC TABLES AND TABLE TOPS.

Herzog, Francisco, Rio Grande do Sul.
FURNITURE AND ALBUM.

Marcenaria Moderna, Amazonas.
FURNITURE.

Nunes, Adrião Severino, Amazonas.
FURNITURE.

Oder, Julio, Rio Grande do Sul.
FINE FURNITURE.

Penitenciaria, Bahia.
FANCY TABLE.

Reil, Gustavo, Santa Catharina.
FANCY TABLE OF NATIVE WOOD.

Stephano, Carlos, Paraná.
FURNITURE.

Silva Telles & Co., S. Paulo.
FURNITURE.

Santos, Saturnino Pereira dos, Amazonas.
FURNITURE.

Secchi, Fratelli, S. Paulo.
SHOW CASE.

Steigleder Sobrinho, G., Rio Grande do Sul.
ICE BOX AND FRAMES.

Tunnes & Co., Rio de Janeiro.
FURNITURE.

GROUP 39.

Stained Glass.

Walmann, José, Rio Grande do Sul.
2 STAINED GLASS WINDOWS.

GROUP 40.

Mortuary Monuments and Undertaker's Furnishings.

Tomagnini Fratelli & Co., G., S. Paulo.
MARBLE URN.

GROUP 41.

Hardware.

Americana, Fundição, Rio de Janeiro.
LETTER BOX.

Becker, Henrique, Rio Grande do Sul.
ENGRAVING ON METAL.

Berta & Co., E., Rio Grande do Sul.
SAFE, COOKING STOVE AND LOCKS, 3 IRON BEDS.

Borgmann, G., Rio Grande do Sul.
FILES.

Bortola, Mosna, Rio Grande do Sul.
PATENT LOCK.

Cardinale, Carlos, S. Paulo.
ENAMEL-PRINTING ON METAL.

Correcção, Casa de, Rio Grande do Sul.
HARDWARE MADE IN PENITENTIARY SHOPS.

Cabral & Co., L. E. da C., Rio de Janeiro.
TIN CANS.

Cabral & Co., Rio de Janeiro.
PRINTING ON TIN.

Freitas & Rangel, S. Paulo.
METALLIC DRY MEASURES.

Gerdan, João, Rio Grande do Sul.
NAILS.

Hoepke & Co., Carl, Sta. Catharina.
NAILS.

Muller & Filhos, Paraná.
FANCY CAST-IRON WORK.

Montemaggiori, Angelo, Rio Grande do Sul.
PAIR OF SCALES.

Pannoni, Domingos, S. Paulo.
TOOL FOR BORING.

Riolfi & Filho, J., Rio Grande do Sul.
HORSE SHOES.

Raminelli, João, Rio Grande do Sul.
STOVE.

Sanders, F., Rio Grande do Sul.
HARDWARE.

Schmidt, Rodolpho, Paraná,
ALUMINUM WARE.

Teixeira, A., Minas Geraes.
HARDWARE.

Torre, Luiz, S. Paulo.
IRON BEDSTEADS.

GROUP 42.

Paper Hanging.

David & Co., Rio de Janeiro.
WALL PAPER.

GROUP 45.

Ceramics

Andressen, Olaria, Amazonas.
CERAMIC PRODUCTS.

Almeida, Antonio de, Amazonas.
MOSAIC TILES.

Bastos, J. P., Maranhão.
STONE-WARE.
BRICKS.
EARTHEN-WARE.

Carlos & Co., Rio Grande do Sul.
MOSAICS.

Capelli, Adamo, S. Paulo.
MOSAICS.

Chermont Braga & Co., Pará.
BRICKS AND TILES.

Co-Operativa V. Colombo, Soc., Paraná.
EARTHEN-WARE FLOWER VASES.
TOILET ARTICLES.
DISHES AND CUPS.
FILTERS AND WATER-COOLERS.
PHOTOGRAPHS AND SAMPLES OF RAW MATERIAL.

This is the most important factory of its kind in the State.

Correcção, Casa de, Rio de Janeiro.
TILES AND MOSAICS.

Crystaes e Vidros, Fabrica de, Rio de Janeiro.
CERAMICS.

Com. do Estado, Piauhy.
CERAMICS.

Duchein, Victor, S. Paulo.
FILTERS.

Falchi, Gianini & Co., S. Paulo.
TILES.

Farias, A. José de, Amazonas.
TILES, BRICKS, ETC.

Guedes, Manoel, S. Paulo.
PIPES AND TILES.

Lavaud, Sensand de, S. Paulo.
PIPES.
BRICKS, ETC.
One of the most important potteries in the State of S. Paulo.

Lunardi Estevão & Co., Minas Geraes.
PAVING TILES, DRY PROCESS, HIGH PRESSURE.

Mesquita, J. C. de, Amazonas.
TILES AND BRICKS.

Moers, Henrique J., Amazonas.
TILES, BRICKS, PIPES, ETC.

Montigny, Frederico de, Rio Grande do Sul.
FILTERS AND PIPES.

Mosaicos, Fabrica de, Parahyba.
MOSAICS.

Mechanica e Importadora, Comp., S. Paulo.
PIPES.

Nina, Heraclito, Maranhão.
EARTHEN-WARE.

Progresso Paulista, Comp., S. Paulo.
PIPES.

Productos Ceramicos, Fabrica de, S. Paulo.
PITCHERS.

Panitz & Irmão, J. A., Rio Grande do Sul.
EARTHEN-WARE.

Robiatti, José, Rio Grande do Sul.
FLOWER VASES AND FILTERS.

Rocha, Raymundo T. G., Minas Geraes.
STONE-WARE.

Rio Negro, Olaria, Amazonas.
CERAMIC PRODUCTS.

Steigleder Sobrinho, Germano, Rio Grande do Sul.
BRICKS, ETC., AND CLAY.

Schimmelpfeng & Co., Paraná.
BRICKS, TILES, ETC.

União, Banco, S. Paulo.
TILES, BRICKS, ETC.

Varonese & Co., Cezar, Amazonas.
TILES.

Walmann, José, Rio Grande do Sul.
CHINA-WARE.

GROUP 47.

Glass and Crystal.

Crystaes e Vidros, Fabrica de, Rio de Janeiro.
GLASS-WARE.

Esberard, Fabrica, Rio de Janeiro.
GLASS-WARE.

Hagstedt & Co., Rio Grande do Sul.
GLASS-WARE.

Pünder, Henrique, Rio Grande do Sul.
GLASS-WARE.

Soryemich Crystalleria, S. Paulo.
GLASS-WARE.

Uras, João, S. Paulo.
GLASS-WARE.

GROUP 48.

Raminelli, João, Rio Grande do Sul.
RANGE FOR COOKING.

GROUP 49.

Apparatus and Methods, not Electrical, for Lighting.

David, D., Rio Grande do Sul.
APP. FOR ACETYLENE GAS FOR DOMESTIC PURPOSES.

GROUP 53.

Equipment and Processes used in Sewing and Making Wearing Apparel.

Fraaquim, José, Paraná.
SHOE LASTS.

Pertica, Alcides H., S. Paulo.
BUST FORMS.

GROUP 54.

Threads and Fabrics of Cotton.

Alliança, Comp. F. e Tecidos, Rio de Janeiro.
COTTON GOODS OF ALL KINDS.

Araujo, Henrique de, Matto Grosso.
COTTON THREADS USED IN THE MANUFACTURE OF HAMMOCKS AND SIMILAR GOODS.

Brazil Industrial, Comp., Rio de Janeiro.
COTTON GOODS AND THREAD.
One of the leading factories in the cotton industries.

Barreto, Viuva, Rio Grande do Norte.
COTTON GOODS.

Camaragibe Cotton Mills, Pernambuco.
COTTON GOODS.

Cachoeira de Macacos, Comp., Minas Geraes.
COTTON GOODS.

Cruz & Co., Sergipe.
COTTON GOODS.

Commissão do Estado, Piauhý.
COTTON GOODS.

Döhler & Co., C. G., Sta. Catharina.
COTTON GOODS OF ALL KINDS.

One of the best equipped and most important factories in Southern Brazil.

Fonseca & Irmão, S. Paulo.
COTTON GOODS.

Fabril Paulistana, Comp., S. Paulo.
COTTON GOODS.

Fonseca, M. José da, S. Paulo.
COTTON GOODS.

Fiação e Tecidos de Pernambuco, Comp., Pernambuco.
COTTON GOODS.

This is the oldest and one of the most important factories in Northern Brazil.

Guedes, Manoel, S. Paulo.
COTTON GOODS.

Italo Brazileira, Comp. Tecelagem, Rio Grande do Sul.
COTTON GOODS.

Industrial Sabarense, Comp., Minas Geraes.
COTTON GOODS.

Industrial Pernambucana, Comp., Pernambuco.
COTTON GOODS.

This is one of the most important cotton mills in Northern Brazil. This company owns several cotton and sugar mills.

Mendes & Co., Pereira, S. Paulo.
COTTON GOODS.

Manufactureira e Agricola, Comp., Maranhão.
COTTON GOODS AND THREAD.

Manufactureira do Codó, Comp., Maranhão.
COTTON GOODS.

Miranda, Rodolpho, S. Paulo.
COTTON GOODS.

Porto Algrense, Companhia F. e T., Rio Grande do Sul.
COTTON GOODS.

Parahybana, Fabrica de Tecidos, Parahyba.
COTTON GOODS.

Ribeiro, Candido José, Maranhão.
COTTON GOODS.

S. Luiz, Fabrica, Maranhão.
COTTON GOODS.

Schlemm, Paulo, Sta. Catharina.
COTTON GOODS, LADIES' UNDERWEAR, HOSIERY, ETC.

Torre, Fabrica da, Pernambuco.
COTTON GOODS.

União, Banco, S. Paulo.
COTTON GOODS.

The Banco União owns the largest cotton and woolen mills in S. Paulo.

União Lavrense, Comp. F. e Tecidos, Minas Geraes.
COTTON GOODS.

União Fabril, Comp., Rio Grande do Sul.
COTTON GOODS.

Weissohn & Co., José, S. Paulo.
COTTON GOODS AND THREADS.

GROUP 55.

Threads and Fabrics of Vegetable Fibres other than Cotton.

Anhaia, Companhia Fabrica, S. Paulo.
JUTE GOODS.

Campos Vianna & Co., Rio de Janeiro.
ROPES AND FIBRES OF NATIVE FIBRES.

A very good example of the quality of material found in Brazil for ropes, bags, mats and other tissues.

In the above exhibit six different varieties of fibres are shown.

Canhamo, Comp. F. e T. de, Maranhão.
HEMP GOODS.

Fiação e Tecidos Porto Alegrense, Comp., Rio Grande do Sul.
LINEN, ETC.

Freitas & Co., Silva, S. Paulo.
JUTE GOODS.

Giustie & Co., Fred, Rio Grande do Sul.
JUTE CORDAGE.

Italo Brazileira, Comp. Tecelagem, Rio Grande do Sul.
LINEN GOODS, ETC.

Industrial Sabarense, Comp., Minas Geraes.
LINEN GOODS.

Maggi, Henrique, S. Paulo.
TWINE MADE OF NATIVE FIBRES.
CORDAGE.
PHOTOGRAPHS.

Mr. Maggi owns a fine factory and the class of goods manufactured is represented by a few samples only.

Penteado, A. Alvares, S. Paulo.
JUTE FIBRES.

The largest factory of this kind in the State, and perhaps in the whole country. The jute is indigenous.

Queiroz, Luiz M. Pinto, S. Paulo.
CORDAGE, FIBRES AND PRODUCTS OF NATIVE FIBRES.

Silva Telles & Co., S. Paulo.
ARAMINA FIBRES AND PRODUCTS, BAGGING, RUGS, ROPES, TWINE, CANVAS, CURTAINS, TRIMMINGS, ETC.

Aramina is an abundant native fibre, very strong and durable. Mr. Telles after some experiments established, a short time ago, a splendid factory of which products the above are samples. Aramina is superior to jute in every respect.

Schaitza, Oscar, Rio Grande do Sul.
RUGS.
CARPETS OF VEGETABLE FIBRES.

GROUP 56.

Yarns and Fabrics of Animal Fibres.

Feira de Sant Anna, Com. M. de, Bahia.
HORSE-HAIR ROPES.

Fiação e Tecidos Porto Alegrense, Comp., Rio Grande do Sul.
BLANKETS, SHAWLS, TWEEDS AND SIMILAR WOOLEN GOODS.

Italo Brazileira, Comp. Tecelagem, Rio Grande do Sul.
WOOLEN GOODS.

These three woolen mills, which have splendid displays are the most important ones in Brazil, and their goods compare most favorably with those imported from other countries.

União Fabril, Comp., Rio Grande do Sul.
WOOLEN GOODS.

GROUP 58.

Laces, Embroideries and Trimmings.

Aguiar, D. Jenny, Rio de Janeiro.
EMBROIDERY ON SATIN.

Aguiar, D. Eulalia, Rio de Janeiro.
EMBROIDERY ON SATIN.

Bica, D. Eulalia Barbosa, Rio de Janeiro.
EMBROIDERED COUNTERPANE.
(Made at 81 years of age.)

Chaves, D. Antonia M., Maranhão.
EMBROIDERY.

Commissão do Estado, Santa Catharina.
LACES.

Commissão do Estado, Piauhý.
LACES.

Collazos, Joaquim, S. Paulo.
EMBROIDERY IN SILK.

Osorio, D. Maria José, Bahia.
EMBROIDERY ON VELVET.

Patrulha, Com. de S. A. da, Rio Grande do Sul.
EMBROIDERED GOODS.

Silva, D. Maria I. da, Maranhão.
EMBROIDERY.

GROUP 59.

Industries Producing Wearing Apparel for Men, Women and Children.

Policial, Brigada, Rio de Janeiro.
UNIFORMS.

Made in the tailor shops of the Police Department.

Teixeira, Alfaiataria, Maranhão.
CLOTHING.

GROUP 60.

Leather, Boots and Shoes, Furs and Skins, Fur Clothing.

Aguiar & Co., Souza, S. Paulo.
SLIPPERS.

Bernert, Francisco, Paraná.
BOOTS AND SHOES.

Boris Freres, Ceará.
LEATHER AND SKINS.

One of the great industries of this State is the raising of goats whose hides are exported by thousands every year.

Commissão de Joinville, Sta. Catharina.
SHOES.

Commissão de Florianopolis, Sta. Catharina.
SHOES.

Carvalho & Co., Affonso, Minas Geraes.
LEATHER.

Costa & Co., Ferreira, Rio Grande do Sul.
BOOTS AND SHOES.

Correcção, Casa de, Rio Grande do Sul.
BOOTS AND SHOES.

Dom Bosco, Escola, Minas Geraes.
SHOES.

Dick & Co., C. A., S. Paulo.
LEATHER.

Ferreira, João de Souza, Paraná.
LEATHER.

Figueiredo, J. F., S. Paulo.
SLIPPERS.

Ferraz Fester & Co., S. Paulo.
SLIPPERS.

Grenier & Abascal, Rio Grande do Sul.
LEATHER.

Kluppel, Antonio, Paraná.
BOOTS AND SHOES.

Kessler, Annibal, Rio Grande do Sul.
LEATHER.

Monteiro, José Evaristo, Parahyba.
LEATHER.

Marroco, Julio, Pará.
SHOES.

Marroco, Guilherme, Pará.
BOOTS AND SHOES.

Oliveira, Padre Manoel Gomes, Matto Grosso.
LEATHER.

Paranhos & Co., Silva, Rio de Janeiro.
SHOE POLISH.

Peluso, Clemente, Sta. Catharina.
SHOES.

Penitenciaria, Bahia.
BOOTS AND SHOES.

Progresso Industrial, Comp., Rio Grande do Sul.
BOOTS, SHOES, ETC.

A very good display showing the fine quality of work done by this factory.

Pereira & Co., Lothario, Paraná.
BOOTS AND SHOES.

Rocha & Co., Coelho da, S. Paulo.
BOOTS AND SHOES.

Rossbach Brothers, Bahia.
LEATHER.

Sant' Anna, Com. M. de Feira de, Bahia.
SKINS AND LEATHER.

Schaitza & Co., Oscar, Rio Grande do Sul.
LEATHER ARTICLES.

Secco & Co., Rio Grande do Sul.
LEATHER.

Silva & Co., Pessoa da, Parahyba.
LEATHER.

Santos & Irmão, Minas Geraes.
SHOES.

Silva Gomes & Irmão, Rio Grande do Sul.
LEATHER AND SHOES.

One of the best factories in the State.

Sans, José, Minas Geraes.
LEATHER AND LEATHER ARTICLES.

Schelenker, Otto, Paraná.
LEATHER.

Verrone, R. Rossi, S. Paulo.
SHOES AND BOOTS.

Vianna, João Carlos, Rio Grande do Sul.
GLOVES.

GROUP 61.

Various Industries Connected with Clothing.

Almeida, J. A. de, Pernambuco.
STOCKINGS.

Alagoinhas, Cam. M. de, Bahia.
STRAW HATS.

Berto Bertacco & Co., Rio Grande do Sul.
STRAW HATS.

Bosisio & Filho, J., S. Paulo.
HATS.

Braga, J. L. Fernandes, Rio de Janeiro.
FELT HATS.

This is the oldest and one of the most important hat factories in Brazil. The goods compare with the best of foreign manufacture and have been awarded prizes at several Expositions, both at home and abroad.

Bueno, Anacleto P., Paraná.
STRAW HATS.

Bataglia, Madame J., Pará.
CORSETS AND SIMILAR GOODS.

Bastos, José, Rio Grande do Sul.
SHIRTS AND UNDERCLOTHING.

Chiaradia & Irmão, F., Rio Grande do Sul.
LADIES' HATS AND FORMS.
GENTLEMEN'S HATS AND FORMS.

Correcção, Casa de, Rio Grande do Sul.
STRAW HATS.

Commissão de S. Francisco, Sta. Catharina.
CANES.

Commissão do Estado, Amazonas.
CANES.

Friederich, Max, Sta. Catharina.
HOSIERY, SHIRTS, UNDERCLOTHING.
The most important manufacturer in the State.

Teichmann, Oscar, Rio Grande do Sul.
FELT HATS.
A fine exhibit of one of the principal factories in Southern Brazil.

Fabril Porto Alegrense, Comp., Rio Grande do Sul.
SHIRTS, UNDERWEAR AND HOSIERY.

Fabrica de Chapeos de Palha, Rio Grande do Sul.
STRAW HATS.

Ferraz Fester & Co., S. Paulo.
HOSIERY.

Feira de Sant' Anna, C. M. de, Bahia.
STRAW HATS.
WALKING STICKS.

Giachi & Cerri, S. Paulo.
STRAW HATS.

Gusi, Santo, Rio Grande do Sul.
STRAW HATS.

Isola, Joaquim, S. Paulo.
BONE BUTTONS.

Jacobsen, Madame Alice, Rio de Janeiro.
FEATHER FANS AND OTHER ARTICLES.
A magnificent display, showing the artistic taste of Mme. Jacobsen and the beauty and variety of the colors of Brazilian birds.

Kaiser & Company, Sta. Catharina.
HOSIERY.

Lima & Co., Julio, Rio de Janeiro.
FELT HATS AND PHOTOGRAPHS.

Lucena, Colonia, Paraná.
STRAW HATS.

Matteo, Madame Jacometti, Rio Grande do Sul.
CORSETS.

Mayser & Kessler, Rio Grande do Sul.
FELT HATS.

Pabst & Co., J., Rio Grande do Sul.
CORSETS AND NECKWEAR.

Peluso, Clemente, Sta. Catharina.
HOSIERY.

Pereira, F. de Souza, S. Paulo.
HATS.

Panto, Dario del. S. Paulo.
HATS.

Sant Anna, C. M. de Feira de, Bahia.
STRAW HATS.
CANES.

Schlemm, P., Sta. Catharina.
LADIES UNDERWEAR.

Schaitza, Oscar, Rio Grande do Sul.
NECKTIES, COLLARS, APRONS, ETC.

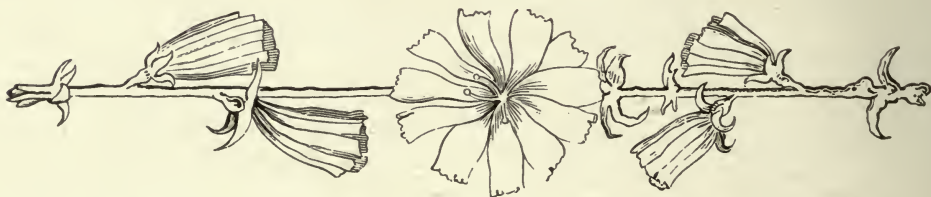
Sommer, Eduardo, Rio Grande do Sul.
FELT HATS.

Schneider, Carlos, Sta. Catharina
NATIVE STRAWS OF DIFFERENT KINDS PREPARED FOR HATS, ETC.

Schritzmeyer & Co., Adolpho, S. Paulo.
HATS.
The oldest and one of the best hat factories in the country.

Tannhauser, F., Rio Grande do Sul.
STRAW HATS, NECKTIES, SHIRTS, ETC., AND PHOTOGRAPH.

Venturini & Co., Libero, Rio Grande do Sul.
STRAW HATS AND ARTIFICIAL FLOWERS.

Weigang, Francisco, Paraná.
FELT HATS.

BRAZILIAN SECTION

DEPARTMENT OF ELECTRICITY

GROUPS 67 to 71

MR. C. COUTO,
Commissioner in Charge of Department of Electricity.

MANY first-class plants have already been installed in several cities for lighting purposes, for street-car service and for generating power, etc., some of which are operated by steam and others by water power.

Water power is plentiful in almost every part of the country and as a rule within a reasonable distance of the cities and towns. Electrical machinery is permitted to enter the country free of duty, most of which in use in Brazil comes from the United States and from Germany. There are several Telegraph and Cable Companies; the overland lines belonging to the Federal Government give very good service. The Cable Companies, connecting Brazil with Europe and North America are owned by private companies.

There are telephone lines in all of the large cities. Besides these, electricity is applied in various ways in Brazil, for industrial, pleasure, medical, navigation and other purposes.

GROUP 67.

Machines for Generating and Using Electricity.

Intendencia de Manaos, Amazonas.
PHOTOGRAPHS OF THE WATER WORKS ELECTRIC PLANT.

Manaos Railway, Amazonas.
PHOTOGRAPHS OF ELECTRIC RAILWAY PLANT.

S. Paulo Tramway, Light & Power Co., S. Paulo.
PHOTOGRAPHS.

Soucassaux, Francisco, Minas Geraes.
PHOTOGRAPHS OF ELECTRIC PLANT AT BELLO HORIZONTE.

GROUP 70.

Telegraphy and Telephony.

Telegraphos, Repartição Geral dos, Rio de Janeiro.
TELEGRAPHIC APPARATUS AND INSTRUMENTS.

MATERIAL USED FOR TELEGRAPH LINES, TOOLS, DRAWINGS, PHOTOGRAPHS, MAPS AND PUBLICATIONS.

União Telephonica, Empreza, Rio Grande do Sul.
REPORTS.

GROUP 71.

Various Applications of Electricity.

Loschi, Eduardo, S. Paulo.
PHOTOGRAPHS AND PUBLICATIONS ON ELECTRICAL RIVER NAVIGATION.

Ramos, Dr. F. F.,
BOOK ON INDUSTRIES AND ELECTRICITY IN THE STATE OF S. PAULO.

BRAZILIAN SECTION

DEPARTMENT OF TRANSPORTATION

GROUPS 72 to 77

VERY few vehicles of any kind, with the exception of automobiles and bicycles, are imported into Brazil.

Carriages, wagons, drays, etc., of all kinds, street cars, railway cars, ambulances, hearses, etc., are all manufactured from splendid Brazilian woods, the hardware and iron fittings being imported from Europe already made in some instances, while in others they are made in Brazil from imported material. Equipment for horses and vehicles is manufactured in the country also, that being on exhibition giving a fair idea of the quality of the material and class of work. Attention is called to the exhibit of the Fire Department of Rio de Janeiro, one of the best in the world. Brazil has over 13,000 miles of railway in operation and about 6,000 miles are in course of construction or being planned at the present time. Some of the lines exhibit several photographs. Bartholomeu de Gusmão, Julio Cezar, Augusto Severo, José do Patrocinio, Santos Dumont and some other Brazilians have contributed much towards the advancement of aerial navigation.

COMMODORE A. CORREA,
Commissioner in Charge of Department of Transportation.

Large and small boats, not to mention canoes, and other small craft are built every year in Brazilian Shipyards, the same state of affairs existing as those pertaining to the building of vehicles, that is, the iron and machinery only being imported.

Trans-Atlantic Steamers and Men-of-war are readily repaired on the docks at our different ship-yards.

The following are the leading exhibits in this department: Fire Department of Rio de Janeiro, Government and Private Railways, exhibits of sets of Harnesses and Saddles, those of the firms Rothfuchs & Irmão, Cunha Guimarães & Co., D. Codega, J. Candido Freire, J. Backer & Irmão, A. Ferroni, C. G. Crespo, also a few interesting publications on railroads and navigation.

The Department of Industry and Public Works exhibits a large map showing the Railway Systems in Brazil.

The State Government of Rio Grande do Sul exhibits a relief map showing the improvements made along the Guahyba River.

GROUP 72.

Carriages and Wheel Wrights Work, Automobiles and Cycles.

Bombeiros, Corpo de, Rio de Janeiro.

WAGON BELONGING TO THE FIRE DEPARTMENT.

HOSE CART.

These articles are made in the shops belonging to the Fire Department, which are completely and perfectly equipped to do all the work required by the Fire Department of a large city. In Rio de Janeiro the Fire Department is a military organization of 624 men and officers, having magnificent central headquarters, stations and sub-stations, and splendidly equipped with engines, fire boats, wagons, hose carts, tools, etc., of high grade. European experts have considered this one of the finest and best organized Fire Departments, as well as one of the most efficient in the whole world.

Knack & Filhos, G., Rio Grande do Sul.

CAST IRON WHEELS FOR CARS.

This is an important establishment, where all kinds of foundry and shop work for railways, factories, steam boats, etc., is done.

Rothfuchs & Irmão, Luiz, Rio Grande do Sul.

ACCESSORIES FOR WHEELS.
PHOTOGRAPHS OF VEHICLES.

This is one of the best equipped plants in the State. All kinds of vehicles and conveyances are manufactured by Messrs. Rothfuchs & Irmãos.

Pardini & Co., F., S. Paulo.

PHOTOGRAPHS OF AN AMBULANCE.

GROUP 73.

Saddlery and Harness.

Bombeiro, Corpo de, Rio de Janeiro.

TOOLS, LADDERS, BUCKETS, ETC.
PHOTOGRAPHS.
SETS OF HARNESS.

These tools, buckets, harness, etc., and in fact everything required by the Fire Department of Rio de Janeiro is made in its splendidly equipped shops by the firemen themselves, who are trained to do the work, for which they show the most ability.

Brüggman, Pereira & Co., Rio Grande do Sul.

MILITARY HARNESS AND SADDLES.

This is a very large factory, which supplies the Brazilian Army with harness and saddles of the types exhibited.

Costa & Co., Ferreira, Rio Grande do Sul.

HARNESS FOR HORSES AND OXEN.

Oxen are used under the saddle in a few places, where horses and mules are expensive and difficult to procure.

Cunha Guimarães & Co., Rio de Janeiro.

FIREMEN'S UNIFORMS AND HATS.

Messrs. C. Guimarães & Co., own one of the principal shops in Brazil for the kind of work they exhibit, that is, military uniforms, hats, etc.

Maineri & Irmãos, Francisco, Rio Grande do Sul.

SADDLES.

Mohr Filho, Felippe, Rio Grande do Sul.

LADIES' SADDLES.

Rowe & Hasselman, Bahia.

HARNESS.

Rudolph, Bernardo, Rio Grande do Sul.
SADDLE.

Rothfuchs & Irmão, Luiz, Rio Grande do Sul.
HARNESS.

Rocha & Filho, Zeferino, Rio Grande do Sul.
HARNESS.

Silva, Victor Henrique, Rio Grande do Sul.
TRIMMINGS FOR SADDLES.

Schneider & Co., Rio Grande do Sul.
JOCKEY SADDLE.
LADIES' SADDLES.
MILITARY SADDLES.
ORDINARY SADDLES.

The exhibit in the Brazilian Section at the Transportation Building proves that the industry of harness and saddle making in Brazil, especially in the State of Rio Grande do Sul is an important one. The quality of material of the above mentioned work exhibited is all first-class in every respect, both in the plain ordinary harness and saddles as well as in the fancy and elaborate kind of work.

GROUP 74.

Railways, Etc.

Argollo, Miguel de T., Bahia.
BOOKS, PUBLICATIONS, REPORTS, MAPS, ETC., PERTAINING TO RAILROADS.

Agricultura, Secretaria da, S. Paulo.
REPORT ON STATE RAILWAYS.

Codega, D., Paraná.
MODEL SHOWING NEW SYSTEM OF TRANSMISSION.

Central do Brazil, E. de F., Rio de Janeiro.
MAP AND PHOTOGRAPHS OF RAILROAD, CONSTRUCTION WORK, ETC.

This is a Government railroad and one of the largest and best equipped in Brazil.

Freire, J. Candido, Ceará.
LUBRICATION BOX FOR RAILROAD CARS.
GUIDE BAR.

Mr. Freire owns a very extensive shop in Ceará, where machinery for the manufacture of sugar and alcohol is made on a large scale.

Great Western of Brazil Railway, Pernambuco.
PHOTOGRAPHS OF RAILROAD, CONSTRUCTION WORK, ETC.

Almost all the railroad lines in the States of Alagoas, Pernambuco, Parahyba and Rio Grande do Norte are owned by this company.

Leopoldina Railway, Rio de Janeiro.
PHOTOGRAPHS.

This company owns lines in the States of Rio de Janeiro, Minas Geraes and Espirito Santo.

Manaos Railway, Amazonas.
PHOTOGRAPHS OF STREET CARS.

Minas & Rio, E. de F., Rio de Janeiro.
PHOTOGRAPHS.

This company handles largely the transportation of cattle for the Rio de Janeiro and S. Paulo markets.

Mogyana Railway, S. Paulo.
PHOTOGRAPHS.

Pessoa, Dr. V. A. de Paula, Rio de Janeiro.
BOOK ON THE CENTRAL R. R. OF BRAZIL.

Progresso Cuyabano Co., Matto Grosso.
PHOTOGRAPHS OF CARS.

S. Paulo Railway, S. Paulo.
PHOTOGRAPHS.

This is one of the richest and most important railroads in Brazil and transports practically all the coffee of the State of S. Paulo.

GROUP 75.

Material and Equipment Used in Mercantile Marine.

Becker & Irmão, José, Rio Grande do Sul.
MOTOR FOR BOAT.

The motor exhibited gives a very good idea of the importance of these shops.

Camara, Almirante A. Alves, Rio de Janeiro.
PUBLICATION ON NAVAL CONSTRUCTION.

Capitania do Porto, Amazonas.
PHOTOGRAPHS OF RIVER CRAFT.

Crespo, Constantino Glz, Matto Grosso.
MODEL OF CARGO BOAT FOR RIVER.

Federal, Governo, Rio de Janeiro.
CANOE WITH SAILS, OARS, ETC.

This canoe is 57 feet long and made of a single tree. These canoes are made and used on the rivers of the interior of Brazil.

Ferroni, Agostinho, S. Paulo.
PHOTOGRAPHS OF LIFE SAVING APPARATUS.

Governo do Estado, Amazonas.
SMALL CANOES.

Giddy & Co., Amazonas.
PHOTOGRAPHS OF SHIPYARDS.

This is one of the most important in the northern part of Brazil.

Lindgren, Carlos F., Rio de Janeiro.
WORK ON NAVIGATION AND MAPS.

Neves, Gabriel S., Matto Grosso.
PHOTOGRAPH OF FERRY BOAT.

Porto, J. A. Santos, Rio de Janeiro.
BOOKS ON MERCANTILE MARINE.

Rawlinson, Dr. R. P., Pernambuco.
MODEL OF CATAMARAN.

Used by fishermen in some places of the northern coast of Brazil.

BRAZILIAN SECTION IN AGRICULTURE BUILDING.

1-2-3-4—Interior Views. 5—Exterior View.

DR. F. RAMOS,
Commissioner in charge of Department
of Agriculture.

DEPARTMENT OF

AGRICULTURE

GROUPS 78 to 96

ITS geographical situation, admirable system of rivers and respective valleys, its immense plateaus and unequaled climate, the regularity of its seasons and the fertility of its soils have made Brazil an ideal agricultural country and, until a few years ago, agriculture was the main occupation of the greater part of the population of Brazil.

Among others the following products constitute the principal articles of culture:

Coffee, of which Brazil produces over 4-5 of the entire production of the world. Cocoa, sugar-cane, tobacco, forage, cereals, grain, beans, roots and tubers of all kinds, cotton of the best quality, herva matte, fruits and vegetables of all kinds and live stock of every description.

In connection with the raising of these articles, the industries for their preparation have been greatly developed and the utilization of the products increased, as is demonstrated by the products exhibited, such as coffee, tobacco, cigars and cigarettes, flour, feculae, starch and meals, Italian food pastes, sugar, chocolate, preserves, packing house and dairy products (cheese, butter, lard, etc.), fibres, oils, preserved fruits and vegetables, wines (grape and other fruits), spices, brandies, liqueurs, syrups, alcohol, beer, vinegar, pastry, forage, preserved meats and fish, textile plants, wool, silk cocoons, beehives, honey and wax and a large collection of photographs, illustrating agricultural processes and systems and everything connected with the farming industries of the country.

GROUP 78.

Farm Equipment—Methods of Improving Land.

Agricultura, Secretaria da, S. Paulo.
PHOTOGRAPHS OF PLANTATIONS, SHOWING VARIOUS CULTURES.

Commissão do Estado, Matto Grosso.
PHOTOGRAPHS OF PLANTATIONS AND FARMS.

Commissão do Estado Paraná.
PHOTOGRAPHS OF PLANTATIONS.

Madureira, Dr. Javert, Paraná.
PHOTOGRAPHS OF FARM.

Morgetti, Pompeu, Rio Grande do Sul.
WIRE STRETCHING MACHINE FOR FENCES.

Prates, Conde de, S. Paulo.
PHOTOGRAPHS OF FARM.

Pereira, Gervasio A., Rio Grande do Sul.
PHOTOGRAPHS OF CATTLE RAISING FARM.

GROUP 79.

Agricultural Implements and Farm Machinery.

Comp. Mecanica & Importadora, S. Paulo.
SHUEMAN'S MACHINE FOR COFFEE.
This machine is exhibited at work hulling coffee at the Brazilian Government Building.

Kerber, Ernesto, Rio Grande do Sul.
PRESS AND MILL FOR MANIOC FLOUR.

Lessa, Carlos, S. Paulo.
COFFEE ROASTER.
Also exhibited at the Government Building of Brazil.

Motta, J. M. da, Rio Grande do Sul.
AGRICULTURAL MACHINE.

Santos, Leopoldo dos, S. Paulo.
PRESS.

Sanders, F., Rio Grande do Sul.
PRESSES FOR MANIOC FLOUR.

Stamato, Raphael, S. Paulo.
PRESS FOR SUGAR.

Santangelo, Pedro A., S. Paulo.
MACHINE FOR COFFEE.
This interesting machine is also on exhibition at work at the Brazilian Government Building.

GROUP 80.

Fertilizers.

Ferreira, Dr. José Duarte, Bahia.
GUANO, BLACK AND WHITE.
Guano is abundant along the southern coast of Bahia and on the Abrolhos Islands.

Isola, Joaquim, S. Paulo.
CHEMICAL FERTILIZER.

Marchesini, Fratelli, S. Paulo.
CHEMICAL FERTILIZERS.

GROUP 81.

Tobacco.

Aguiar & Co., J. G., Amazonas.
VEGETABLE CIGARETTE WRAPPERS.

Azevedo & Co., Pernambuco.
TOBACCO.

Argollo Cardoso & Co., Bahia.
TOBACCO.

Aguiar, Domingos V. de, Bahia.
TOBACCO.

Agricultura, Secretaria da, Bahia.
TOBACCO.

Bahia is celebrated for its fine tobacco and specially for its cigars, which are exported in immense quantities to Europe.

Andrade & Andrade, Minas Geraes.
CIGARETTES AND TOBACCO.

One of the best factories in Brazil, and situated in one of the finest regions of the country for tobacco.

Altenburg & Co., Rodolpho, Sta. Catharina.
CIGARS AND TOBACCO.

Blumenau, E. Agronomica, Sta. Catharina.
CIGARS AND TOBACCO.

Blumenau, Soc. Agricola, Sta. Catharina.
TOBACCO.

Bastos, José Gonçalves, Amazonas.
TOBACCO AND CIGARETTES.

Borba, Intend. de, Amazonas.
TOBACCO AND CIGARETTES.

Barros, Antonio Paes de, Matto Grosso
TOBACCO.

Bastos, J. R., Maranhão.
TOBACCO.

Borges Paula & Co., Bahia.
CIGARETTES.

Blumenau, Municipio de, Sta. Catharina.
CIGARS.

Cardoso, Odulpho, Minas Geraes.
TOBACCO.

Costa Ferreira & Penna, Bahia.
CIGARS.

This firm manufactures some of the best brands of cigars in Brazil.

Carvalho, Adolpho C. de, Minas Geraes.
CIGARETTES.

Campos & Co., Piauhý.
TOBACCO.

Com. M. de Codajáz, Amazonas.
VEGETABLE CIGARETTE WRAPPERS.

Com. M. de Itacoatiára, Amazonas.
TOBACCO.

Couto, Joaquim, Rio Grande do Sul.
TOBACCO.

Com. M. de Parintins, Amazonas.
TOBACCO.

Correia & Co., J. Francisco, Rio de Janeiro.
CIGARETTES AND TOBACCO.

The most important establishment of its kind in Rio de Janeiro.

Com. do Estado, Paraná.
TOBACCO.

Curytibanos, Commissão de, Sta. Catharina.
TOBACCO.

Camargo, Pedro de A., S. Paulo.
TOBACCO.

Dannemann & Co., Bahia.
TOBACCO, CIGARS AND PHOTOGRAPHS.

The oldest and one of the principal cigar factories in Brazil.

Domingos, Martins & Co., Rio Grande do Sul.
TOBACCO AND CIGARETTES.

Fiuza & Co., Parahyba.
TOBACCO.

Feira de Sant' Anna, C. Municipal, Bahia.
TOBACCO.

Firmino, João, Parahyba.
TOBACCO.

Guimarães, Augusto O. M., Maranhão.
TOBACCO.

Guedes, Pedro Augusto, Minas Geraes.
TOBACCO.

Guimarães & Co., Goyaz.
CIGARS.

Guedes, Dario, Minas Geraes.
TOBACCO.

Guimarães, Joaquim G., Paraná.
TOBACCO.

Hartmann Sobrinho, Jacob, Rio Grande do Sul.
TOBACCO.

Havaneza, Casa, Amazonas.
TOBACCO AND CIGARETTES.

Jequié, C. Municipal, Bahia.
TOBACCO.

Jardim, Coronel Eugenio, Rio de Janeiro.
TOBACCO.

Lourenço, Manger, Paraná.
TOBACCO.

Lopes, Laurindo, Paraná.
CIGARETTES.

Leite & Alves, Bahia.
CIGARETTES.
One of the most important cigarette factories of Brazil.

Mendes Correa & Co., Pará.
TOBACCO.

Maciel, Domingos, Paraná.
TOBACCO.

Moreira & Co., Pernambuco.
TOBACCO.

Mendes & Santos, Minas Geraes.
TOBACCO.

Miranda, Aristides de, S. Paulo.
CIGARS.

Motta, A. F., Bahia.
TOBACCO.

Muller, Jorge, Rio Grande do Sul.
TOBACCO.

Monteiro, Simão Moreno, Rio Grande do Sul.
TOBACCO.

Magalhães, Carlos B., S. Paulo.
TOBACCO.

Oliveira, João Antonio, Paraná.
TOBACCO.

Paula Bastos & Co., Parahyba.
TOBACCO.

Pacheco, Manoel, Bahia.
CIGARETTES.

Pereira, Col. A. Ribeiro, Minas Geraes.
TOBACCO.

Porto & Co., Rio de Janeiro.
TOBACCO.

Poock & Co., Rio Grande, do Sul. and Bahia.
CIGARS.
This is at the present time the best cigar factory in Brazil.

Pereira, Fellipe S., Pernambuco.
CIGARS AND CIGARETTES.

Rio do Cedro, Sociedade do, Sta. Catharina.
TOBACCO.

Ribeiro, Thomaz de Aquino, Minas Geraes.
TOBACCO.

Ribeiro, Arthur Tiburcio, Minas Geraes.
TOBACCO.

Rhode, H., Rio Grande do Sul.
CIGARS.

Rodrigues, João Freire, Paraná.
TOBACCO.

Roerbel, José P. A., Paraná.
TOBACCO AND CIGARS.

Siqueira & Co., Rio de Janeiro.
TOBACCO.

Silva, Dr. Alexandre C. da, Bahia.
TOBACCO.

Souza, E. J. de, Bahia.
TOBACCO.

Stumpe & Studer, Bahia.
TOBACCO.

Scarpa, João Baptista, Minas Geraes.
TOBACCO.

Soares, Antonio José, Minas Geraes.
TOBACCO.

Santos, Thomaz Rodrigues dos, Minas Geraes.
TOBACCO.

Silveira & Co., Amaro da, Rio Grande do Sul.
TOBACCO AND CIGARETTES.

Stone & Filhos, Amazonas.
TOBACCO AND CIGARETTES.

Seidel, Francisco, Paraná.
TOBACCO.

Simões & Co., João, Rio Grande do Sul.
TOBACCO.

Tiburcio, Irmaõs, Minas Geraes.
TOBACCO.

GROUP 82.

Appliances and Methods Used in Agricultural Industries.

Rio de Janeiro Flour Mills and Granaries, Ltd., Federal Capital.
PHOTOGRAPHS OF MILLS.

GROUP 83.

Theory of Agriculture—Agricultural Statistics.

Agricultura, Secretaria da, S. Paulo.
PHOTOGRAPHS AND MAPS OF FARMS AND STATISTICAL ALBUMS, BOOKS, CHARTS, ETC.

Agronomico, Instituto, S. Paulo.
ANALYSES OF SOILS OF VARIOUS AGRICULTURAL PRODUCTS AND OF FERTILIZERS.

Geologica, Com., S. Paulo.
MAP SHOWING THE COFFEE REGION OF THE STATE.

S. João da Montanha, Escola A. de, S. Paulo.
RELIEF MAP OF THE STATE.

GROUP 84.

Vegetable Food Products—Agricultural Seeds.

Arruda, Dr. João B. de O., S. Paulo.
CEREALS.

Auler, Pedro, Rio Grande do Sul.
RICE.

Agricultura, Sec. da, Bahia.
OILS, CEREALS.

Amaral, Dr. Octavio, Paraná.
WHEAT.

Antarctica, Comp., S. Paulo.
HOPS AND RICE.

Antonio, Commissão de Sto., Paraná.
BEANS AND RICE.

Amaral, José do, Paraná.
BEANS.

Botelho, Dr. Carlos, S. Paulo.
HAY AND CORN.

Berunstein, Carlos, Rio Grande do Sul.
CEREALS AND BIRD SEED.

Blumenau, E. A. de, Sta. Catharina.
WHEAT.

Blumenau, Soc. A., Sta. Catharina.
CEREALS.

Bobrowski, Augusto, Paraná.
OATS.

Balzala, Padre, Matto Grosso.
CEREALS AND BEANS, ETC.

Bajio, Auello, Paraná.
BEANS.

Bove, A., S. Paulo.
RYE.

Castro, Commissão de, Paraná.
BEANS AND RICE.

Calietal, João, Paraná.
BARLEY.

Curityba, Commissão de, Paraná.
RICE, WHEAT AND BARLEY.

Calitak, João, Paraná.
BARLEY AND RYE.

Centro do Commercio de Cereaes, Rio de Janeiro.
CEREALS.

Cerqueira Lima, Viuva, Bahia.
COCOA.

Emmert, Jorge, Rio Grande do Sul.
CORN.

Flores, João de D., Rio Grande do Sul.
CORN.

Feira de Sant' Anna, C. Municipal, Bahia.
CEREALS.

Freitas, Diogo A. de, Paraná.
WHEAT.

Griebeler, Bernardo, Rio Grande do Sul.
PEAS AND BARLEY.

Garibaldi, C. Municipal de, Rio Grande do Sul.
CEREALS AND BEANS.

Gonçalves, Umbelino, Bahia.
COCOA.

Guimarães, João G., Paraná.
RICE.

Haluch, Pedro, Paraná.
WHEAT.

Haner, Roberto, Paraná.
RYE.

Itacoatiara, Intend. de, Amazonas.
CEREALS.

Iguassú, Com. de, Sta. Catharina.
RICE.

Junta Commercial de Manaos, Amazonas.
COCOA AND CEREALS.

Jequié, C. Municipal, Bahia.
FORAGE.

Kohlrausch Filho, Pedro, Rio Grande do Sul.
CEREALS.

Leder Sobrinho, José, Rio Grande do Sul.
OILS.

Lapa, Commisão de, Paraná.
BEANS AND RICE.

Mendes, Vasco, Rio Grande do Sul.
BEANS.

Mangoldi, G., Rio Grande do Sul.
OILS.

Moscardi, Marianno, Paraná.
CORN.

Moura, Brazilino, Paraná.
SOJA.

Muller & Irmão, Carlos, Paraná.
BRAN.

Maria, João, Paraná.
BEANS.

Numbach, Umberto, Rio Grande do Sul.
BEANS.

Opperman, Pedro, Rio Grande do Sul.
OILS AND BEANS.

Paganello, Antonio, Rio Grande do Sul.
BEANS.

Pinto, Dr. Luiz A., S. Paulo.
HAY.

Pires, Major José da Cunha, Rio de Janeiro.
FLOWER SEEDS.

Porto Alegre, Commissão, Rio Grande do Sul.
BEANS AND CEREALS.
Polaca, Com., Paraná.
CEREALS.
Palmeira, Commissão de, Paraná.
BARLEY, RYE, WHEAT.
Ribas, Rodolpho de Macedo, Paraná.
FORAGE.
Rollo, Agostinho J. Moreira, S. Paulo.
RICE.
Soares, Dr. Albino, S. Paulo.
POTATOES.
Schell, Felisbina, Rio Grande do Sul.
BEANS.
Schrammel, C. A., Rio Grande do Sul.
SEEDS.
Streid, Leonardo, Rio Grande do Sul.
RICE.
Selbach Junior, Jacób, Rio Grande do Sul.
CEREALS, OILS AND BEANS.
Schrammel, C. Augusto, Rio Grande do Sul.
OILS AND BEANS.
Stumpe & Studer, Bahia.
COCOA.
S. C. de Jesus, Colonia, Matto Grosso.
CEREALS, BEANS, ETC.
Sertãosinho, C. M. de, S. Paulo.
BEANS.
Souza, José Germano de, S. Paulo.
RICE AND BEANS.
Tavares, A. Pereira, Rio Grande do Sul.
BEANS.
Troener, Augusto, Rio Grande do Sul.
BEANS.
Valle, José, Maranhão.
SUGAR CANE.
Weber, Carlos, Rio Grande do Sul.
BEANS.
Wilderberger & Co., Bahia.
COCOA.
Wittmann, André, Rio Grande do Sul.
OILS.
Zacharias, A. F., S. Paulo.
RICE.

COFFEE EXHIBITORS.

Argollo, Cardoso & Co., Bahia.
Albuquerque. D. Mariana, Rio de Janeiro.
Avellar & Co., Minas Geraes.
Araujo & Co., Eduardo, Rio de Janeiro.
Alves Junior, Col. João José, Rio de Janeiro.
Aguas Claras, Barão de, Rio de Janeiro.
Araujo & Co., Eduardo, Minas Geraes.
Araujo Maia & Co., Minas Geraes.
Abreu, Belchior Pimenta de, Minas Geraes.
Arruda, Antonio Franco de, S. Paulo.
Aranha, Silvino E. de Souza, S. Paulo.
Avellar & Co., S. Paulo.
Almeida, Joaquim T. Nogueira de, S. Paulo.
Amaral, Carlos Alberto, S. Paulo
Alvarenga, Dr. Antonio S. de, S. Paulo.
Almeida, Candido M. de, S. Paulo
Almeida, D. Anna Egydia de, S. Paulo.
Adams, Dr. Hector de O., S. Paulo.
Accorsi Egydio, Irmãos, S. Paulo.
Almeida, Juliano M., S. Paulo.
Andrade, Eliziario F. de C., S. Paulo.
Arary, Baroneza de, S. Paulo.
Amaral, João Soares, S. Paulo.
Aranha, Col. José Francisco, S. Paulo.
Avelino & Couto, S. Paulo.
Arruda, D. Maria L. de S., S. Paulo.
Andrade, Domingos Villela de, S. Paulo.
Almeida, Dr. José Cardozo de, S. Paulo.
Andrade, Alexandre Villela de, S. Paulo.
Andrade, André Villela de, S. Paulo.
Abreu, Theodoro, S. Paulo.
Abreu, Col. M. Franco, S. Paulo.
Alves Irmão, Rodrigues, S. Paulo.
Azevedo, M. Urbano de, S. Paulo.
Alves, Col. Virgilio Rodrigues, S. Paulo
Almeida, Joaquim de F. P. de, S. Paulo.
Azevedo, D. Maria Carolina de, S. Paulo.
Andrade, Dr. Candido J. de, S. Paulo.
Agricultura, Secretaria da, Bahia.
Aguiar, Domingos V. de, Bahia,
Amazonas, Secretaria do, Amazonas.
Assis & Co., Theodorico, Minas Geraes.
Antonina, Com. de, Paraná.
Alcantara, Aprigio S. de, Bahia.
Almeida, Luiz Alves de, S. Paulo.
Alves, Valdemiro P., S. Paulo.
Araujo & Co., Eduardo, S. Paulo.
Alvarenga, Dr. Antonio P. de, S. Paulo.
Almeida & Co., Pedro Alexandrino de, S. Paulo.
Almeida & Co., Pinto de, S. Paulo.
Aranha, Dr. Olavo Egydio de Souza, S. Paulo.
Araujo, Baroneza de, S. Paulo.
Almeida, Dr. José Ribeiro de, S. Paulo.
Almeida, Victor Martins de, S. Paulo.
Banco Hypothecario do Brazil, Rio de Janeiro.
Banco Credito Real do Brazil, Rio de Janeiro.
Braga, José Ferreira Leal, Rio de Janeiro.
Barros, Col. A. B. Monteiro de, Minas Geraes.
Boris Freres, Ceará.
Barros & Martins, Monteiro de, S. Paulo.
Barreto, Dr. Rodrigo Pereira, S. Paulo.
Barros, Vicente Soares de, S. Paulo.
Barros, Dr. Bento de, S. Paulo.
Botelho, Dr. Carlos J., S. Paulo.
Barros, Turibio Leite de, S. Paulo.
Branco, Col. Frederico, S. Paulo.
Barreto, Dr. Augusto F. de M., S. Paulo.
Barão & Mattos, S. Paulo.
Borges, João B. de O., S. Paulo.
Bittencourt, Manoel I., S. Paulo.
Borba, João, S. Paulo.
Barros & Magalhães, Irmãos, S. Paulo.
Barreto, Cap. Luciano M., S. Paulo.
Barreto, Cap. Leopoldo Vieira, S. Paulo.
Boening, Henrique, Rio Grande do Sul.

Borges, A. Mendes, S. Paulo.
Barros, Luis Teixeira de, S. Paulo.
Barros & Co., Queiroz, S. Paulo.
Brazilian Commission, Rio de Janeiro.
Brazil, Dr. Moura, Rio de Janeiro.
Barros, M. Paula Leite de, S. Paulo.
Brodes, Eduardo, S. Paulo.
Barbosa, Joaquim Bueno, S. Paulo.
Barros, Dr. Carlos Paes de, S. Paulo.
Barros, Alonso Leite de, S. Paulo.
Carvalho & Irmão, Raul de Resende, S. Paulo.
Conceição & Co,, S. Paulo.
Camargo, Pedro Ferreira de, S. Paulo.
Coffee Commission Merchants, S. Paulo.
Camargo, Elisiario F. de C., S. Paulo.
Commercio, Banco da Lavoura e, S. Paulo.
Correia, Dr. Manoel da Silveira, S. Paulo.
Centro do Commercio de Café, Rio de Janeiro.
Correa & Co., Luiz, Rio de Janeiro.
Chagas, D. Marianna, Minas Geraes.
Comp. Oriente, Minas Geraes.
Caire, Dr. Felippe A., Rio de Janeiro.
Coutinho, Jannes, Lixa & Co., S. Paulo.
Coelho, Duarte & Co., Rio de Janeiro.
Conceição, Dr. Francisco J., S. Paulo.
Conceição, Julio, S. Paulo.
Cintra, João B., S. Paulo.
Carvalho, Augusto T. de, S. Paulo.
Conceição & Filhos, S. Paulo.
Canto, Col. J. Leite de, S. Paulo.
Carvalho, Col. Bento J. de, S. Paulo.
Cavalcanti, Arthur Furtado A., S. Paulo.
Camargo, Col. Francisco Soares de, S. Paulo.
Colletes & Irmão, Serafim, S. Paulo.
Cesarino, José, S. Paulo.
Cesarino, Irmão & Co., S. Paulo.
Camargo & Irmão, Francisco de, S. Paulo.
Cintra, D. Angelica U., S. Paulo.
Costa, Dr. Jambeiro, S. Paulo.
Companhia Oriente, S. Paulo.
Camargo & Genro, D. Maria L. N. de, S. Paulo.
Carvalho, Col. Getulio de, S. Paulo.
Correa, Domiciano J., S. Paulo.
Cezar, Dr. Abelardo Cerqueira, S. Paulo.
Camargo, Col. João Pereira de S., S. Paulo.
Campos, Alvaro Pompeu Paes de, S. Paulo.
Correa, Dr. Manoel da Silva, S. Paulo.
Castro, Antonio Leoncio de, S. Paulo.
Camargo Filho, Antonio J. de, S. Paulo.
Campos, Teophilo A., S. Paulo.
Clark, Roberto, S. Paulo.
Camargo, Candido F. da Silva, S. Paulo.
Castro & Irmão, Victorino, S. Paulo.
Coelho, Germano José, S. Paulo.
Carvalho D. Maria A. da Cunha, S. Paulo.
Camargo, Col. Floriano A. de S., S. Paulo.
Cunha, Francisco Pinto da, S. Paulo.
Camargo, Eugenio F. de, S. Paulo.
Carvalho, Cap. Pedro A. de, S. Paulo.
Campos, Americo Rocha, S. Paulo.
Citro, K., S. Paulo.
Camargo, Dr. Manoel Leite, S. Paulo.
Cintra, Joaquim de A., S. Paulo.
Correa, Prudente José, S. Paulo.
Camargo, Floriano F., S. Paulo.
Correa & Irmão, S. Paulo.
Carvalho, Col. João Procopio A., S. Paulo.
Cunha & Filho, S. Paulo.
Com. de Paranaguá, Paraná.
Com. de Antonina, Paraná.
Com. de Guarakessaba, Paraná.
Com. de Castro, Paraná.
Com. de Morretes, Paraná.
Caldas, Joaquim S. de C., Matto Grosso.
Com. do Estado, Sta. Catharina.
Couto, Col. Jeremias Cordeiro, Rio de Janeiro.
Carvalho & Co., L., Rio de Janeiro.
Ciribelli, Menezes & Co., Rio de Janeiro.
Cortes, Col. Oscar T. de F., Minas Geraes.
Carvalho & Co., L., Minas Geraes.
Costa, José Ribeiro da, Minas Geraes.
Campos, Leite de, S. Paulo.
Cunha, Bueno & Co., S. Paulo.
Carbone & Co., Fr. Puglizi, S. Paulo.
Duarte & Co., Minas Geraes.
Duque Estrada & Co., Cezar, Minas Geraes.
Dias Garcia & Co., Rio de Janeiro.
Dias Garcia & Co., Minas Geraes.
Dias, Pio de Souza, Minas Geraes.
Dumont, Comp. Agric. Fazenda, S. Paulo.
Diehl, Felippe Jacób, S. Paulo.
Diederichsen & Jordão, S. Paulo.
Dias, Cap. Candido de Souza, S. Paulo.
Dias, Theophilo Custodio, S. Paulo.
Dias Junior, Vicente, S. Paulo.
Dias, Alipio Luiz, S. Paulo.
Dias, Honorio Luiz, S. Paulo.
Dias, Manoel Ribeiro, S. Paulo.
Diedrichzen, Arthur, S. Paulo.
Dias, Irmão & Co., S. Paulo.
Esteves, D. Maria F. Pimentel, Rio de Janeiro.
Egydio, Dr. Olavo, S. Paulo.
Ellis & Netto, S. Paulo.
Egydio & Irmão, Pedro, S. Paulo.
Esteves, João, S. Paulo.
Fazenda S. José do R. Preto, Rio de Janeiro.
Fazenda Colonia Rio Preto, Rio de Janeiro.
Fazenda Sant' Anna de Trez Ilhas, Rio de Janeiro.
Fazenda Bom Retiro, Minas Geraes.
Fontes, Luiz Gonçalves, Rio de Janeiro.

Fernandes, Vellozo & Co., Minas Geraes.
Ferraz, Joaquim Dias, Minas Geraes.
Fernandes Velloso & Co., Rio de Janeiro.
Figueiredo, João Urbano de, Minas Geraes.
Fazenda de S. Martinho, Penha Longa, Minas Geraes.
Figueiredo, Col. José Ferreira de, S. Paulo.
Ferreira Junior & Saraiva, S. Paulo.
Fonseca, Joaquim Leite da, S. Paulo.
Figueiredo, Col. Francisco Garcia de, S. Paulo.
Ferraz, J. Elias, S. Paulo.
Ferreira & Irmão, Antonio, S. Paulo.
Franco, Messias, S. Paulo.
Ferreira & Co., B. Ribeiro, S. Paulo.
Fontana & Della Marta, Paraná.
Franco, A. da Silveira, S. Paulo.
Fonseca & Lara, S. Paulo.
Ferraz, D. Marianna L. de F., S. Paulo.
Ferreira, D. Iria Alves, S. Paulo.
Faria, José Pedro, S. Paulo.
Ferreira, Isaias José, S. Paulo.
Fagundes, Domiciano, S. Paulo.
Ferreira & Co., Silva, S. Paulo.
Fontini, N., S. Paulo.
Ferreira, João Candido A., S. Paulo.
Ferreira, J. Vicente de Q., S. Paulo.
Franco, Dr. Antonio de S., S. Paulo.
Fontes, José A. Correa, S. Paulo.
Ferraz, João L. Sampaio, S. Paulo.
Fernandes Moreira & Co., S. Paulo.
Guimarães Gonçalves & Co., Minas Geraes.
Garcia Pereira & Co., Rio de Janeiro.
Guimarães, João, Rio de Janeiro.
Garcia, Candido Pereira, Rio de Janeiro.
Garcia Junior, Manoel Luiz, Rio de Janeiro.
Goulart, Honorio J. de A., Minas Geraes.
Gomes, F., S. Paulo.
Gomes, Dr. Leopoldo A., S. Paulo.
Gonçalves, Gregorio José, Minas Geraes.
Gouveia Brandão & Co., Minas Geraes.
Guimarães, Domingos da Silva, Minas Geraes.
Gomes, Francisco Braz P., Minas Geraes.
Garcia, Francisco Pereira, S. Paulo.
Góes, José Sampaio, S. Paulo.
Godoy, Arthur A., de, S. Paulo.
Gomes, Bento, S. Paulo.
Guimarães Gonçalves & Co., S. Paulo.
Guimarães, Ovidio Ferreira, S. Paulo.
Gonçalves, F. T., Sta. Catharina.
Horta, Santos & Co., M. Guimarães, Rio de Janeiro.
Hellwig & Co., Carl, S. Paulo.
Heralle & Siqueira, S. Paulo.
Horn, Eduardo, Sta. Catharina.
Johnston & Co., E., Rio de Janeiro.
Jordão, João do Prado, Rio de Janeiro.
Junqueira, Gabriel de Andrade, Minas Geraes.
Junqueira & Co., S. Paulo.
Junqueira, Dr. A. Diniz, Rio de Janeiro.
Junqueira, João Baptista, S. Paulo.
Jundiahy, Baroneza de, S. Paulo.
Junqueira, Luiz M. Diniz, S. Paulo.
Jaguariahyva, Com. de, Paraná.
Kaiser, Carlos, Rio Grande do Sul.
Lutterbach, Antonio, Rio de Janeiro.
Lessa, Armindo, Rio de Janeiro.
Leite, Albino Cerqueira, Minas Geraes.
Lisboa, José Vicente X., Minas Geraes.
Lima, Antonio de Freitas, Minas Geraes.
Lutterbach & Co., Monnerat, Minas Geraes.
Lima, Francisco A. de Freitas, Minas Geraes.
Leme, Octavio da Silva, S. Paulo.
Lima, Arthur C. de A., S. Paulo.
Lara, José Martins de, S. Paulo.
Lara, João de Toledo, S. Paulo.
Lima, Col. José Pereira, S. Paulo.
Lapa, Col. A. Carlos Amaral, S. Paulo.
Leite, D. Flora de A., S. Paulo.
Leite, Francisco José, S. Paulo.
Lacerda, D. Anna M. de, S. Paulo.
Lacerda & Piza, S. Paulo.
Leite & Santos, S Paulo.
Lima & Co., Prado, S. Paulo.
Lima & Co., Alves, S. Paulo.
Lara, Antonio M. de A., S. Paulo.
Lima, Cap. João Ferraz de, S. Paulo.
Leite, Dr. Hormindo, S. Paulo.
Limeira, Baroneza de, S. Paulo.
Leme, José de Salles, S. Paulo.
Leite, Antonio C. de A., S Paulo.
Lima, Dr. Luiz Zacharias de, S. Paulo.
Macedo & Soares, Paraná.
Miranda, Rodolpho M. da R., S. Paulo.
Morretes, Commissão de, Paraná.
Maia & Ribeiro, S. Paulo.
Macedo & Filho, Paraná.
Moraes & Co., Jorge de, S. Paulo.
Mello & Co., Almeida, S. Paulo.
Martins & Co., Delfino, S. Paulo.
Martins & Irmão, S. Paulo.
Melchert, Antonio C., S. Paulo.
Magalhães & Co., Marcolino, Bahia.
McKinley, Schmidt & Co., Rio de Janeiro.
Martins & Valle, Rio de Janeiro.
Moraes, Col. Vicente Ferreira de, Rio de Janeiro.
Marinho Pinto & Co., Minas Geraes,
McKinley Schmidt & Co., Minas Geraes.
Mello, Senador Baptista de, Minas Geraes.
Mattos & Co., Monteiro, Espirito Santo.
Marques, Augusto B., S. Paulo.
Moraes, Manoel de, S. Paulo.
Mascarenhas, João de Paula, S. Paulo.
Martins, Domingos José, S. Paulo.
Marques, Vicente T., S. Paulo.
Moraes, Col. Fabiano S. de, S. Paulo.
Maciel, Dr. Theophilo, S. Paulo.
Moreira, Eduardo de Godoy, S. Paulo.
Meyer, Dr. Victor, S. Paulo.
Machado, Dr. J. A. M., S. Paulo.
Meirelles, Severino de Souza, S. Paulo.
Mourão, J. Leme, S. Paulo.
Magalhães, Carlos B. de, S. Paulo.

Maniquarto, José, Paraná.
Marcondes, Manoel F. de Moura, S. Paulo.
Miranda, Dr. Leopoldo N. da R., S. Paulo.
Melchert, Carlos, S. Paulo.
Motta & Filho, Viuva, S. Paulo.
Motta, J. Ribeiro de Oliveira, S. Paulo.
Maia, Orozimbo, S. Paulo.
Macedo, Antonio Barbosa, S. Paulo.
Martins, Viuva Baptista, S. Paulo.
Martins & Almeida, Victor, S. Paulo.
Martins de Almeida & Co., S. Paulo.
Monteiro, Cap. Urias A., S. Paulo.
Marques, Cap. João Candido, S. Paulo.
Monerat, José Constancio, Rio de Janeiro.
Miranda Jordão & Co., Minas Geraes.
Mayrink, João de Lellis, Minas Geraes.
Miranda, F. Valverde de, Minas Geraes.
Martins Frazão & Canellas, Minas Geraes.
Moreira, Joaquim Silverio, Minas Geraes.
Moreira, Joaquim L. de Souza, Minas Geraes.
Machado, Guimarães, Fernandes & Co., Minas Geraes.
Monteiro Mattos & Co., Minas Geraes.
Mendonça, Francisco F. de, Minas Geraes.
Monteiro, Cornelio de Paula, Minas Geraes.
Moreira, Dr. Delfim, Rio de Janeiro.
Maia & Co., Araujo, Minas Geraes.
Malta & Cerquinho, S. Paulo.
Moraes, Feliciano F. de, Rio de Janeiro.
Martins, Alfredo Lopes, Rio de Janeiro.
Moraes Junior, Antonio Rodrigues, S. Paulo.
Moraes, Elias A. de, Rio de Janeiro.
Machado, Francisco Salles V., Espirito Santo.
Machado, Augusto F., Rio de Janeiro.
Martins, João de Moraes, Rio de Janeiro.
Monnerat, Col. José, Rio de Janeiro.
Miranda, Francisco Valverde de, Rio de Janeiro.
Montes & Co., J., Rio de Janeiro.
Menezes, Manoel Joaquim de, Rio de Janeiro.
Martins & Co., Rio de Janeiro.
Martins Frazão & Constancio, Rio de Janeiro.
Mello, José Soares de, S. Paulo.
Mazagão, Thiago, S. Paulo.
Mello, Francisco P. de S., S. Paulo.
Navega, José Pinheiro, S. Paulo.
Nogueira, Pedro de Almeida, Minas Geraes.
Nogueira, Telles, Quirino & S. Paulo.
Nasti, Vicente, S. Paulo.
Novaes, D. Francisca Dias, S. Paulo.
Nogueira, Tourville, S. Paulo.
Nogueira, Manoel Victor, S. Paulo.
Nogueira, José Paulino, S. Paulo.
Netto, Porfirio Moreira, S. Paulo.
Oliveira, Joaquim Candido de, S. Paulo.
Oliveira & Barros, S. Paulo.
Oliveira Monteiro & Co., Rio de Janeiro.
Old Fazenda Coffee, S. Paulo.
Oliveira, Albino J. Barbosa de, S. Paulo.
Oliveira & Irmão, Barbosa de, S. Paulo.
Oliveira Sobrinho, Raphael de, S. Paulo.
Oliveira, F. Leopoldino de, Rio Grande do Sul.
Oliveira, Mario O. R. de, S. Paulo.
Oliveira, Gabriel A. da S., S. Paulo.
Oliveira, Dr. Alberto de, S. Paulo.
Penteado & Branco, Prestes, S. Paulo.
Penteado & Co., Ignacio, S. Paulo.
Palmeira, C. M. de, Rio Grande do Sul.
Procopio, Irmão & Co., João, S. Paulo.
Pacheco & Silva, Coronel, S. Paulo.
Pratrulha, Commissão de Sto. A. da, Rio Grande do Sul.
Procopio, João, S. Paulo.
Paulo & Prado, S. Paulo.
Prado, Dr. Martinho, S. Paulo.
Pamplona & Fortes, Rio de Janeiro.
Poubel, Augusto, Rio de Janeiro.
Pinheiro & Ladeira, Rio de Janeiro.
Passos Junior, Joaquim Antonio dos, Rio de Janeiro.
Pombo, José da Rocha, S. Paulo.
Pinho & Co., Manoel, Rio de Janeiro.
Pinheiro & Ladeira, Minas Geraes.
Pinto, Alexandre Francisco, Minas Geraes.
Pupo, Francisco de Salles, S. Paulo.
Penteado, Ignacio, S. Paulo.
Pinto, Dr. Luiz Augusto, S. Paulo.
Palto & Irmão, Monteiro, S. Paulo.
Pedreira, Innocencio B., S. Paulo.
Padua, F. Pimenta de, S. Paulo.
Padua, D. Cidalia P. de, S. Paulo.
Penteado, Col. Antonio, S. Paulo.
Pimentel, Antonio P. R., S. Paulo.
Penteado & Irmão, Eliziario, S. Paulo.
Paula, D. Maria C. Teixeira de, S. Paulo.
Penteado, José de Camargo, S. Paulo.
Pinheiro, Oliverio F., S. Paulo.
Palma, Antonio Vieira de A., S. Paulo.
Penteado, Col. Pedro, S. Paulo.
Pupo, Ignacio da S., S. Paulo.
Penteado, Col. João C. Leite, S. Paulo.
Paranapanema, Baroneza de, S Paulo.
Piza & Irmão, Tabda, S. Paulo.
Pinheiro, D. Emilia P., S. Paulo.
Penteado & Serra, S. Paulo.
Pinho & Co., Manoel, S. Paulo.
Paranaguá, Com. de, Paraná.
Queiroz Moreira & Co., S. Paulo.
Queiroz & Amaral, Souza, S. Paulo.
Queiroz, Dr. José de Souza, S. Paulo.
Queiroz, Antonio de Souza, S. Paulo.
Queiroz, Luiz A. de Souza, S. Paulo.
Queiroz, Dr. Francisco A. de Souza, S. Paulo.
Rodrigues, Dr. Manoel Orlando, Rio de Janeiro.
Rezende, Domingos Ribeiro de, Minas Geraes.
Ribeiro, Matheus, Rio de Janeiro.
Ribeiro, Cap. José Balbino, Minas Geraes.
Reis, André Fernandes dos, Minas Geraes.

Ribeiro, Antonio Constantino, Minas Geraes.
Ribeiro, Josué Leite, Minas Geraes.
Rosa, Bibiano F. da, Minas Geraes.
Ribeiro, Antonio Olyntho, Minas Geraes.
Renno Junior, Antonio J., Minas Geraes.
Rosa, A. Ferreira da, S. Paulo.
Romano & Irmãos, S. Paulo.
Ramos, Dr. Francisco Ferreira, S. Paulo.
Rezende & Meirelles, S. Paulo.
Rios, D. Maria A. de Gouveia, S. Paulo.
Rinaldi, Miguel A., S. Paulo.
Rocha, Antonio Carlos da, S. Paulo.
Ribeiro, Amancio, S. Paulo.
Ribeirão Preto, Comp. Agric., S. Paulo.
Ribeirão Preto, C. M. de, S. Paulo.
Rosa & Co., Ferreira da, S. Paulo.
Sampaio & Co., Raphael, S. Paulo.
Serro Azul, Commissão de, Paraná.
Siqueira, Martins de, S. Paulo.
Souza, Cap. Benigno P. de, Bahia.
Sant' Anna, C. M. Feira de, Bahia.
Santa Fé, Fazenda, Minas Geraes.
Silveira, Eugenio Tristão, Rio de Janeiro.
Sucena, Vicente Ferreira, Rio de Janeiro.
Santos & Rego, Rio de Janeiro.
Souza, José Firmino V. de, Minas Geraes.
Senna & Carvalho, Minas Geraes.
Santos & Rego, Minas Geraes.
Silva & Co., José, Minas Geraes.
Silva, Joaquim Meirelles da, Minas Geraes.
Santiago Junior, Col. João Carneiro, Minas Geraes.
Soares, José de Lacerda, S. Paulo.
Siqueira, Cap. João Ferraz de, S. Paulo.
Souza, Col. Urias Carlos de, S. Paulo.
Silva, Cap. Manoel Jayme de M., S. Paulo.
Souza, Col. Florencio Carlos de, S. Paulo.
Santos, Dr. J. Ribeiro de A., S. Paulo.
Salles, Dr. Joaquim de, S. Paulo.
Souza, Col. Joaquim Leite de, S. Paulo.
Siqueira, Col. Delphino M. de, S. Paulo.
Santos, João Affonso dos, S. Paulo.
Silva, J. C. I., S. Paulo.
Salles, Dr. Antonio de Padua, S. Paulo.
Sampaio, Col. José Ferraz, S. Paulo.
Sampaio, Sebastião Ferraz, S. Paulo.
Soares, Dr. João Teixeira, Minas Geraes.
Sertãosinho, C. Municipal de, S. Paulo.
S. Simão, C. Municipal de, S. Paulo.
Souza & Co., S. Paulo.
Souza & Filho, Viuva, S. Paulo.
Souza, Braulio Rodrigues de, S. Paulo.
Silva, Dr. Carolino F. da, S. Paulo.
Silva, José Pedroso da, S. Paulo.
Sampaio, José Rodrigues, S. Paulo.
Sampaio, F. Domingues, S. Paulo.
Sampaio, Affonso B. de A., S. Paulo.
Souza, Antonio Correa de, S. Paulo.
Santos, Virginio P. dos, S. Paulo.
Sampaio, Joaquim B. de A., S. Paulo.
Schmidt, Francisco, S. Paulo.
Soares, D. Presciliana O., S. Paulo.
Sattamini & Co., Francisco, S. Paulo.
Torres & Co., J. J., Minas Geraes.
Teixeira, D. Anna Alves, Minas Geraes.
Tostes, Candido Teixeira, Minas Geraes.
Teixeira Junior, Col. José, S. Paulo.
Tatuhý, Baroneza de, S. Paulo.
Telles, Felippe Barbosa, Rio Grande do Sul.
Toledo & Co., Lara Campos, S. Paulo.
Toledo & Co., Salles, S. Paulo.
Teixeira, D. Iria Alves, S. Paulo.
Torres & Co., J. J., Rio de Janeiro.
Uchoa, Dr. Ignacio Mendonça, S. Paulo.
Vellozo & Co., Fernandes, Espirito Santo.
Vergueiro, D. Leonina Mendes, S. Paulo.
Val, D. Francisca Silveira do, S. Paulo.
Villas Boas Sobrinho, Col. A. José, S. Paulo.
Valle, Joaquim A. R. do, S. Paulo.
Vieira, Francisco Gomes, S. Paulo.
Vellozo & Irmão, Leão, S. Paulo.
Vieira & Moura, S. Paulo.
Valle & Co., Marques, S. Paulo.
Vergueiro. Irmão & Sobrinho, S. Paulo.
Whitaker & Bomfim, S. Paulo.
Wille & Co., Theodor, S. Paulo.
Weber, F. Monteiro, Paraná.

GROUP 85.

Animal Food Products.

Ayrosa, Theodoro Marcos, S. Paulo.
LARD.
Antunes & Co., Luiz, Rio Grande do Sul.
LARD.
Arnt & Co., E., Rio Grande do Sul.
LARD.
Aubert, Eugenio, Amazonas.
LARD AND OILS.
Andrade & Co., Mario, Minas Geraes.
BUTTER.
Azevedo & Co., Minas Geraes.
BUTTER.
Carmo do Rio Claro, Fabrica do, Minas Geraes.
BUTTER.
Carmo do Rio Verde, Fabrica do, Minas Geraes.
BUTTER.
Carvalho, Col. Antonio Moreira de, Minas Geraes.
BUTTER.
Duque, Antonio José, Minas Geraes.
BUTTER.
Einloft, G., Rio Grande do Sul.
BUTTER.
Elijalde & Co., Rio Grande do Sul.
LARD.

Fortes, Dr. Carlos da Silva, Minas Geraes.
BUTTER.
Guedes, Alipio, Minas Geraes.
CHEESE.
Greco & Co., Nicola, Rio Grande do Sul.
LARD.
Gomes & Co., Otero, Rio Grande do Sul.
LARD.
Kohlrausch & Co., Pedro, Rio Grande do Sul.
LARD.
Mantiqueira, Comp. Lacticinios, Minas Geraes.
BUTTER.
Machado, Zeferino, Rio Grande do Sul.
LARD.
Oderich & Co., A., Rio Grande do Sul.
LARD.
Pontalete, Fabrica do, Minas Geraes.
BUTTER.
Pinho & Filhos, Manoel, Sta. Catharina.
LARD.
Renner & Co., Jacob, Rio Grande do Sul.
LARD.
Souza, José Dias de, Rio Grande do Sul.
LARD.
Traituba, Fabrica de Lacticinios da, Minas Geraes.
BUTTER.
União da Banha, Fabrica, Rio Grande do Sul.
LARD.

GROUP 86.

Equipments and Methods Employed in the Preparation of Foods.

Fischer, Bortolo, Rio Grande do Sul.
MACHINE FOR FOOD PASTES.
Itaicý, Usina, Matto Grosso.
PHOTOGRAPHS OF SUGAR FACTORY.

GROUP 87.

Farinaceous Products and their Derivatives.

Argollo, Cardoso & Co., Bahia.
CASSAVA AND TAPIOCA.
Agricultura, Sec. da, Bahia.
FLOUR AND STARCH.
Assis, Francisco de, Maranhão.
STARCH AND FARINACEOUS PRODUCTS.
Albino & Co., Rio Grande do Sul.
FLOUR.
Aurvalle, Samuel, Rio Grande do Sul.
PASTES.
Antunes & Co., Luiz, Rio Grande do Sul.
FLOUR.
Azevedo, Leonel, Rio Grande do Sul.
STARCH.
Albuquerque, M. A. de, Amazonas.
BANANA FLOUR.
Almeida Filho, João B. de, Matto Grosso.
FLOUR AND STARCH.
Antonina, Commissão, Paraná.
STARCH AND CORN FLOUR.
Andrade, Aureliano, Paraná.
CORN FLOUR.
Altenburgo & Co., Rodolpho, Sta. Catharina.
FLOUR.
Berunstein, Carlos, Rio Grande do Sul.
CORN FLOUR.
Beckman, João, Rio Grande do Sul.
FLOUR AND STARCH.
Baptista & Irmão, Sebastião, Amazonas.
BANANA FLOUR.
Bueno, Anacleto P., Paraná.
CORN FLOUR.
Curitibanos, Commissão de, Sta. Catharina.
CORN FLOUR.
Calais, João Ignacio, Rio Grande do Sul.
MANIOC FLOUR.
Cunico & Irmão, João, Paraná.
CORN, WHEAT AND RYE FLOUR.
Cordeiro, Arsenio Glz., Paraná.
STARCH AND MANIOC FLOUR.
Correa, Ladislao, Paraná.
MANIOC FLOUR
Darrick, P., Paraná.
FLOUR.
Florianopolis, Commissão de, Sta. Catharina.
FARINACEOUS PRODUCTS.
Giuntini, Carlos, S. Paulo.
PASTES.
Governo do Estado, Amazonas.
FISH FLOUR.
Grimaldi, Nathale, Rio Grande do Sul.
FOOD PRODUCTS.
Guarakessaba, Commissão de, Paraná.
MANIOC FLOUR
Humaytá, Intend. de, Amazonas.
BANANA FLOUR AND ARROW ROOT FLOUR.
Jequié, C. Municipal de, Bahia.
TAPIOCA FLOUR AND STARCH.
Kilian, Francisco, Paraná.
STARCH AND CORN FLOUR.
Lenpintz, Emilio, Rio Grande do Sul.
CORN FLOUR.
Leite, Pedro, Paraná.
STARCH.
Morretes, Com. de, Paraná.
BANANA FLOUR.
Maria Luiza, Colonia, Paraná.
QUIXERA.
Moinho Matarazza, S. Paulo.
FLOUR.
Moinho Rio Grandense, Rio Grande do Sul.
FLOUR.
Manaos, Intend. de, Amazonas.
PASTES.
Netto, Manoel de Macedo, Paraná.
RICE STARCH.
Nina, Heraclito, Maranhão.
STARCH AND FARINACEOUS PRODUCTS.

Patrulha, Commissão da, Rio Grande do Sul.
FLOUR.

Porto Alegre, Commissão de Rio Grande do Sul.
FLOUR.

Rio Janeiro Flour Mills & Granaries Ld., Rio de Janeiro.
FARINACEOUS PRODUCTS.

Rio Grande, Com. de, Rio Grande do Sul.
FLOUR.

Reis, A. M., Amazonas.
ITALIAN FOOD PASTES.

Radel João, Rio Grande do Sul.
CORN FLOUR.

Rio Negro, Com. do, Paraná.
CORN FLOUR.

Suplicy, Arthur, Paraná.
CORN FLOUR AND STARCH.

Sant' Anna, Com. de F. de, Bahia.
MANIOC AND TAPIOCA FLOUR AND STARCH.

Secchi, Fratelli, S. Paulo.
MACARONI.

Silva, J. Moreira da, Sta. Catharina.
BANANA FLOUR.

Simoni, Paulo, Minas Geraes.
ITALIAN FOOD PASTES.

Silva, F. de Assis e, Maranhão.
STARCH AND FARINACEOUS PRODUCTS.

Schmidt, Sebastião M., Rio Grande do Sul.
FLOUR.

S. José dos Pinhaes, Commissão de, Paraná.
FLOUR AND CEREALS.

Silva, J. J. Xavier da, Paraná.
MANIOC FLOUR.

Silva, Manoel X. da, Paraná.
FLOUR.

Tavares, A. Pereira, Rio Grande do Sul.
STARCH.

Todeschini & Irmão, Raphael, Paraná.
PASTES.

Vieira, Casa, Amazonas.
BANANA FLOUR.

Walter, Guilherme F., Sta. Catharina.
STARCH AND ARROW ROOT FLOUR.

GROUP 88.

Bread and Pastry.

Andrade, D. B. Meirelles de, Amazonas.
BISCUITS AND CAKES.

Leal, Santos & Co., Rio Grande do Sul.
BISCUITS.

Neugebauer Irmãos, Rio Grande do Sul.
BISCUITS.

Oliveira & Co., Luiz da Fonseca, Pernambuco.
BISCUITS.

Perez, Herdeiros de J. F., S. Paulo.
BISCUITS.

Riffer & Co., Oscar, Rio Grande do Sul.
BISCUITS.

Reichert Irmãos, S. Paulo.
BISCUITS.

Votta & Co., Giovanni, S. Paulo.
BISCUITS.

GROUP 89.

Preserved Meat, Fish, Vegetables and Fruit.

Andrade & Andrade, Minas Geraes.
PRESERVED FRUITS.

Agricultura, Sec. da, Bahia.
FRUITS.

Antonina, Commissão de, Paraná.
PRESERVED FISH, ETC.

Batalha, João, Pará.
PRESERVED FRUITS.

Brito, C. F. Xavier de, Pernambuco.
PRESERVED FRUITS.

Barbosa, Loureiro & Co., Pernambuco.
PRESERVED FRUITS.

Costa & Co., Amorim, Pernambuco.
PRESERVED VEGETABLES.

Conservas Alimenticias, Comp. M. de, Rio de Janeiro.
PRESERVED FRUITS.

Cibillis, Fabrica, Matto Grosso.
PRESERVED MEATS AND EXTRACTS.

Calo & Co., E. I., Rio Grande do Sul.
PRESERVED MEATS.

Com. do Estado, Amazonas.
FLOUR MADE FROM DRIED FISH.

Drummer, João, Rio Grande do Sul.
PRESERVED FRUITS.

Francisco, Commissão de S., Sta. Catharina.
PRESERVED SHRIMPS.

Fabre & Co., Paul, S. Paulo.
ASSORTED FRUIT.

Guedes, Francisco P. L., Pará.
PRESERVED FRUITS.

Leal, Santos & Co., Rio Grande do Sul.
PRESERVED MEATS, FISH AND FRUITS.

Moura, Padre João C. de, Pernambuco.
PRESERVED FRUITS.

Machado, D. D. Ermelinda & Amalia, Maranhão.
PRESERVED FRUITS.

Oderich & Co., Rio Grande do Sul.
PRESERVED CHICKEN.

Paredão, Estabelecimento do, Rio Grande do Sul.
PRESERVED MEATS AND VEGETABLES.

Perdigão, Domingos C., Maranhão.
PRESERVED FRUITS.

Pinho & Filhos, Sta. Catharina.
PRESERVED MEATS.

Trein, Viuva Carlos, Rio Grande do Sul.
PRESERVED CHICKEN.

Schramm & Filhos Guilherme, Rio Grande do Sul.
PRESERVED FRUITS.

GROUP 90.

Sugar and Confectionery—Condiments and Relishes.

Assú da Torre, Barão de, Bahia.
SUGAR.

Aguiar, Domingos Valente de, Bahia.
SUGAR.

Altenburgo & Co., Rodolpho, Sta. Catharina.
PRESERVES.

Amaral e Silva, J. Ferreira, Paraná.
MATTE.

Antonina, Com. de, Paraná.
MATTE.

Amaral, Evaristo T. do, Rio Grande do Sul.
MATTE.

Almeida Filho, João B. de, Matto Grosso.
CONDIMENTS.

Azevedo, B. R. de, Paraná.
MATTE.

Berthold, J., Paraná.
VINEGAR.

Bottentuit, Paulo, Maranhão.
SUGAR.

Boening, Henrique, Rio Grande do Sul.
SPICES.

Barboza, Theodoro, Rio Grande do Sul.
SUGAR.

Baptista & Irmão, S., Amazonas.
COCOA.

Berger, Augusto, Amazonas.
MOLASSES AND SYRUPS.

Boa Vista, Fazenda, Amazonas.
PEPPER AND PREPARATIONS, MOLASSES AND PRESERVES.

Barros, Antonio Paes de, Matto Grosso.
SUGAR.

Cardoso & Co., F. Amaral, Pernambuco.
VINEGAR.

Cezar & Co., Gonçalves, Bahia.
SUGAR.

Com. do Estado, Amazonas.
PEPPER AND PRESERVES.

Correia, Victorino, Paraná.
MATTE.

Cavalcanti, D. Antonia, Amazonas.
FRUIT PRESERVES.

Carneiro & Co., David, Paraná.
MATTE.

Companhia Manufactora de C. Alimenticias, Rio de Janeiro.
GOIABADA.

Companhia Geral de Melhoramentos, Pernambuco.
SUGAR.

Carvalho & Comp., Martins de, Minas Geraes.
SUGAR.

Commissão do Estado, Paraná.
MATTE.

Frei Caneca, Colonia, Pernambuco.
SUGAR.

Ferreira Junior & Saraiva, S. Paulo.
COFFEE AND SUGAR.

Fincato & Co., Brinati, S. Paulo.
CONFECTIONERY.

Gerin & Co., M., Rio de Janeiro.
SYRUPS.

Governo do Estado, Pernambuco.
SUGAR.

Governo do Estado, Alagoas.
SUGAR.

Guedes, Francisco Pinto Lima, Pará.
BACURY JELLY.

Gianini & Co., Falchi, S. Paulo.
CONFECTIONERY AND CHOCOLATE.

Governo do Estado, Matto Grosso.
VANILLA.

Guimarães & Co., Paraná.
MATTE.

Hennig, Hugo, Rio Grande do Sul.
VINEGAR.

Iguassú, Fabrica, Paraná.
MATTE.

Industrial Pernambucana, Comp., Pernambuco.
SUGAR.

Industrial Joinville, Companhia, Sta. Catharina.
MATTE.

João da Cruz, Viuva e Filhos de, Maranhão.
SUGAR.

Kruel & Kruel, Rio Grande do Sul.
MATTE.

Leite, José Pereira, Maranhão.
SUGAR.

Lima, Dr. Camara, Maranhão.
SUGAR.

Leão Junior, Agostinho E. de, Paraná.
MATTE.

Lima, Dr. F. da Rocha, Bahia.
SUGAR.

Lipiani, J., Rio de Janeiro.
CHOCOLATE AND CANDIES.

Manhães & Irmão, Rio de Janeiro.
SUGAR.

Macedo Junior, J. R. de, Paraná
MATTE.

Matte Larangeira, Comp., Matto Grosso.
MATTE.

Marques, A. da Costa, Matto Grosso.
CHOCOLATE.

Menezez D. Catharina M. de, Amazonas.
FRUIT PRESERVES.

Melchert, A. C., S. Paulo.
SUGAR.

Mendes, E. R., S. Paulo.
TEA.

Mendes, J. Lourenço, Rio Grande do Sul.
SUGAR.

Moreau, J., Rio Grande do Sul.
MATTE.

Moraes, Dr. Frederico R., Bahia.
SUGAR.
Magalhães & Co., Marcolino, Bahia.
CHOCOLATE AND SUGAR.
Momm, Frederico, Minas Geraes.
VINEGAR.
Neugebauer Irmãos, Rio Grande do Sul.
CHOCOLATES.
Neugebauer Irmãos, Rio Grande do Sul.
CANDIES.
Navarro, D. Anna, S. Paulo.
SAUCES.
N. S. das Dores, Usina, Rio de Janeiro.
SUGAR.
Opperman, Pedro, Rio Grande do Sul.
MATTE.
Ollveira, J. Lourenço da S., Pernambuco.
SUGAR.
Parintins, Camara Municipal de, Amazonas.
COCOA.
Ploeterle, F., S. Paulo.
CHOCOLATE AND CANDIES.
Pereira, João, Rio Grande do Sul.
SUGAR.
Pellegrini, A., S. Paulo.
CONFECTIONERY.
Quissamã, E. Central, Rio de Janeiro.
SUGAR.
Riachuelo, Engenho, Parahyba.
SUGAR.
Riachuelo, E. Central, Sergipe.
SUGAR.
Recurso, Engenho, Maranhão.
SUGAR.
Ramos, Bernardo, Amazonas.
PRESERVES AND CONDIMENTS.
Reichert Irmãos, S. Paulo.
CONFECTIONERY.
Sucreries Villa Raffard, Societé Anonyme des, S. Paulo.
SUGAR AND PLAN OF MILLS.
Silva, Affonso, Rio Grande do Sul.
MATTE.
Santos & Co., Leal, Rio Grande do Sul.
MARMALADE.
Silva, Virgilio Xavier da, Paraná.
TEA.
Selbach Sobrinho, Carlos, Rio Grande do Sul.
MATTE.
S. Lourenço, Colonia, Paraná.
MATTE.
S. João, E. Central, Parahyba.
SUGAR.
Souza, Augusto O. de, Pernambuco.
SUGAR.
Santos Lima & Co., Maranhão.
CHOCOLATE.
Sá Ribeiro & Co., Bahia.
SUGAR.
Tertuliano & Filhos, Bahia.
CHOCOLATE.
Valente, Paiva & Co., Amazonas.
PRESERVES AND CONDIMENTS.

GROUP 91.

Waters.

Cardoso & Co., F., Amaral, Pernambuco.
CARBONATED WATER.

GROUP 92.

Wines and Brandies.

Amorim, José S., Bahia.
BRANDY.
Altenburgo & Co., Rodolpho, Sta. Catharina.
WINE.
Azevedo, Alberto de, Amazonas.
BRANDY.
Aguiar, Freire de, Rio de Janeiro.
BRANDY.
Artigas & Co., S. Paulo.
BRANDY.
Aubert, Eugenio, Amazonas.
BRANDY.
Antonina, Commissão de, Paraná.
BRANDY.
Andrade, J. Sant' Anna, Goyaz.
BRANDY.
Barroca, Custodio, Minas Geraes.
WINE.
Botelho, C. de Almeida, Alagoas.
WINES.
Brandão, Francisco Pinto, Rio de Janeiro.
BRANDY AND WINES.
Berger, Augusto, Amazonas.
BRANDY.
Barros, Antonio Paes de, Matto Grosso.
BRANDY.
Bonsolhos, D. Candida, Goyaz.
LIQUEURS.
Bisol, José, Rio Grande do Sul.
WINES.
Becker, José, Rio Grande do Sul.
WINES.
Bier, H., Rio Grande do Sul.
WINES.
Berthold, J., Paraná.
WINES.
Bittencourt, J. Gualberto, Paraná.
WINES.
Brazil, Miguel, Rio Grande do Sul.
WINES.
Carneiro, Januario L., Minas Geraes.
BRANDIES.
Castilho, Col. João Alves, Minas Geraes.
WINES AND BRANDIES.
Coulon & Co., V., S. Paulo.
BRANDY.
Castro, A., Minas Geraes.
ORANGE WINE.
Chermont Braga & Co., Pará.
BRANDY.
Cardoso & Co., F. Amaral, Pernambuco.
FRUIT WINES AND BRANDY.
Cruz & Co., Antonio, Pernambuco.
FRUIT WINES.
Carvalho, Antonio H., Matto Grosso.
BRANDY.
Christiá & Co., Rio Grande do Sul.
WINES.

Chitolina, Angelo, Rio Grande do Sul.
WINES.
Canzonieri, Pascal, Rio Grande do Sul.
WINES.
Cunha, Amando, Paraná.
WINES.
Carneiro, José N. C., Goyaz.
WINES AND BRANDY.
Dishel, João C., Rio Grande do Sul.
WINES.
Dominicanos, Frades, Goyaz.
WINES.
Engenho Recurso, Maranhão.
BRANDY.
Equi & Co., Minas Geraes.
BRANDY.
Fraccaroli & Co., Guido, Minas Geraes.
COGNAC.
Freitas & Seippel, Bahia.
BRANDY.
Figueiredo, Aurelio A., Minas Geraes.
WINES AND BRANDY.
Faraco, Raphael, Sta. Catharina.
WINE.
Florianopolis, Commissão de, Sta. Catharina.
BRANDY.
Forneck, Miguel, Rio Grande do Sul.
WINES.
Foggiato, G. & F., Paraná.
WINES.
Guimarães, G., Rio Grande do Sul.
WINE.
Gerin & Co., M., Rio de Janeiro.
WINES AND BRANDY.
Governo do Estado, Rio Grande do Sul.
WINES.
Gonzaga, C. Municipal de S. Luiz, Rio Grande do Sul.
BRANDY.
Grassman, Henrique, S. Paulo.
FRUIT WINES.
Germani, Aristides, Rio Grande do Sul.
WINES.
Galleto, João, Paraná.
BRANDY.
Hecker, Antonio, Rio Grande do Sul.
WINES.
Hennig, Hugo, Rio Grande do Sul.
BRANDY.
Industria Vinicola Pelotense, Rio Grande do Sul.
COGNAC.
João da Cruz, Viuva e Filhos de, Maranhão.
BRANDY.
José, F. P., Minas Geraes.
WINES.
Jesus, Felicissimo F. de, Rio Grande do Sul.
BRANDY.
Lapa & Co., Tavares, Pernambuco.
BRANDY.
Lobosco, Vicente Romano, Minas Geraes.
COGNAC.
Lima, Dr. Camara, Maranhão.
BRANDY.
Labatut, Dr. V., Rio de Janeiro.
FRUIT WINES.

Louzada, Antonio Pinho, Rio Grande do Sul.
BRANDY.
Leipenst, Theodoro, Rio Grande do Sul.
WINES.
Malaia, João A. F., Rio de Janeiro.
BRANDY.
Medeiros & Co., Pernambuco.
BRANDY.
Munbach, Alberto, Rio Grande do Sul.
BRANDY.
Maineri & Irmão, F., Rio Grande do Sul.
WINES.
Moura, Brazilino, Paraná.
WINES.
Muller, Rodolpho, Paraná.
WINES.
Nogueira & Co., Arthur, S. Paulo.
BRANDY.
Nicolao, José, Goyaz.
LIQUEURS.
Oppermann, Pedro, Rio Grande do Sul.
BRANDY.
Oliveira Machado, Colonia, Amazonas.
BRANDY.
Pitanga, Genesio de Souza, Bahia.
BRANDY.
Pereira Pinto & Co., Pernambuco.
BRANDY.
Parada, Feliciano P., Maranhão.
BRANDY.
Paulino, José Polycarpo, Rio Grande do Sul.
BRANDY.
Parolini, Germano, Rio Grande do Sul.
BRANDY.
Porto, M. Alves, Rio Grande do Sul.
WINES.
Polydoro, Antonio, Paraná.
FRUIT WINE.
Poplade, M. Gaston, Paraná.
WINES.
Quissamã, E. Central, Rio de Janeiro.
BRANDY.
Ribeiro, Diogo Martins, S. Paulo.
ORANGE WINE.
Rossato & Irmão, Paulo, Rio Grande do Sul.
GRAPE JUICE.
Ritter, João, Rio Grande do Sul.
BRANDY.
Ramos & Co., Franco, Rio Grande do Sul.
WINES.
Sala, Julian, Sta. Catharina.
BRANDY AND WINE.
S. Simão, C. Municipal de, S. Paulo.
ORANGE WINE.
Silva, Ignacio R. da, Rio Grande do Sul.
BRANDY.
Selbach Junior, Jacob, Rio Grande do Sul.
BRANDY.
Silva, J. de Deus Luis da, Rio Grande do Sul.
BRANDY.
Sartori & Irmão, Lino, Rio Grande do Sul.
WINE.

Serpa, Floriano, Bahia.
COGNAC.

Silva & Co., Parahyba.
CAJÚ WINE.

Simoni, Paulo, Minas Geraes.
COGNAC.

Societe Anonyme des Distilleries, S. Paulo.
BRANDY.

Thielen, Henrique, Paraná.
BRANDY.

Trevizan, Antonio, S. Paulo.
BRANDY.

Teixeira, J. P., Sergipe.
FRUIT WINES.

Tobal, E. Velasco, Paraná.
WINES.

Thielen, Henrique, Paraná.
FRUIT WINES.

Usina Itaicy, Matto Grosso.
BRANDY.

Valle, J. Alves do, Maranhão.
BRANDY.

Vasconcellos, Padre Manoel Mendes P. de, Minas Geraes.
WINE.

Vianna, Alberto F., Rio de Janeiro.
WINES.

Voluz, Emmanuel, Paraná.
WINES.

GROUP 93.

Syrups and Liqueurs—Distilled Spirits—Commercial Alcohol.

A. S. & Co., Pará.
ALCOHOL.

Assucareira, Comp., Sergipe.
ALCOHOL.

Aguiar, Freire de, Rio de Janeiro.
SYRUPS, LIQUEURS, SPIRITS.

Aubert, Eugenio, Amazonas.
SYRUPS, LIQUEURS, SPIRITS AND ALCOHOL.

Artigas & Co., S. Paulo.
ALCOHOL.

Barreto, Dr. L. P., S. Paulo.
ALCOHOL.

Botelho, Candido, Alagoas.
CAJÚ WINE.

Bove, Antonio, S. Paulo.
LIQUEURS.

Berthaud, Ch., Minas Geraes.
LIQUEURS AND DISTILLED SPIRITS.

Brazil, Miguel, Rio Grande do Sul.
APERIENT WATER.

Commissão do Estado, Matto Grosso.
ALCOHOL.

Coulon & Co., V., S. Paulo.
BEVERAGES.

Cruz & Co., A., Pernambuco.
COGNAC, VERMOUTH AND GIN.

Carneiro, Januario L., Minas Geraes.
LIQUEURS.

Carneiro, Jose N. C., Goyaz.
ORANGE LIQUEURS.

Clerici & Co., F., S. Paulo.
LIQUEURS.

Christiá & Co., Rio Grande do Sul.
LIQUEURS.

Distillação Rio Grandense, Rio Grande do Sul.
ALCOHOL.

Equi & Co., Minas Geraes.
DISTILLED SPIRITS.

Freitas & Seippel, Bahia.
LIQUEURS AND ALCOHOL.

Fracarolli & Co., Guido, Minas Geraes.
DISTILLED SPIRITS.

Fincato & Co., Brinati, S. Paulo.
LIQUEURS.

Gerin & Co., M., Rio de Janeiro.
SYRUPS, LIQUEURS AND SPIRITS.

Hennig, Hugo, Rio Grande do Sul.
DISTILLED SPIRITS, APERIENTS.

Issler, Julio, Rio Grande do Sul.
ALCOHOL.

Itaicý, Usina, Matto Grosso.
ALCOHOL AND LIQUEURS.

Josetti, Evaristo, Matto Grosso.
ALCOHOL AND LIQUEURS.

Kroeff Filho, Jacób, Rio Grande do Sul.
ALCOHOL.

Lessa, Macario, Pernambuco.
BRANDY.

Lobosco, Vicente R., Minas Geraes.
DISTILLED SPIRITS.

Lavigne & Co., F. de, Paraná.
GIN AND OTHER SPIRITS.

Melhoramentos, Comp. Geral de, Pernambuco.
ALCOHOL.

Momm, Frederico, Minas Geraes.
LIQUEURS.

Pacheco, Dr. José P., Parahyba.
ALCOHOL.

Pereira Pinto & Co., Pernambuco.
COGNAC AND RUM.

Recurso, Engenho, Maranhão.
ALCOHOL.

Riachuelo, E. Central, Sergipe.
ALCOHOL.

S. João, E. Central Parahyba.
ALCOHOL.

Serpa, Floriano, Bahia.
COGNAC.

Simoni, Paulo, Minas Geraes.
APERIENTS.

Sá, Arthur de, Paraná.
LIQUEURS.

Silva, João, Rio Grande do Sul.
LIQUEURS.

Selbach Junior, Jacób, Rio Grande do Sul.
LIQUEURS.

Teixeira & Co., Bahia.
SYRUPS AND SWEET LIQUEURS.

Tavares, Lapa & Co., Pernambuco.
COGNAC, VERMOUTH AND GIN.

Torres, Possidonio, Rio Grande do Sul.
COGNAC.

Travaglio, Luiz, S. Paulo.
VERMOUTH.

Trevizan, Antonio, S. Paulo.
ALCOHOL.

Varoli & Pedretti, Aleixo, S. Paulo.
EUCALYPTUS LIQUEUR.

GROUP 94.

Fermented Beverages.

Antarctica, Comp., S. Paulo.
BEER.

Bopp, Carlos, Rio Grande do Sul.
BEER.

Bengtsson & Co., Ernesto, Paraná.
BEER.

Christoffell, Successor, F., Rio Grande do Sul.
BEER.
PHOTOGRAPHS OF BREWERY.

Henrique Stupakoff & Co., S. Paulo.
BEER.

Kremer & Co., Minas Geraes.
BEER.

Maschke & Co., Georg, Rio de Janeiro.
BEER.

Preiss, Haussler & Co., Rio de Janeiro.
BEER.

Ritter & Filhos, Rio Grande do Sul.
BEER.

Stiebler, Carlos, Minas Geraes.
BEER.

Thielen, Henrique, Paraná.
BEER.

Viveiros & Co., Rio de Janeiro.
BEER.

Weiss, José, Minas Geraes.
BEER.

GROUP 95.

Non-edible Agricultural Products.

Anjos, Col. Antonio P. dos, Parahyba.
COTTON.

Amorim & Campos, Pernambuco.
COTTON SEED OILS.

Agricultura, Sec. da, Pernambuco.
COTTON FIBRES.

The cotton from Pernambuco and the Northern States of Brazil is known as the best in the world, and is in great demand by European mills on account of the strength and length of its fibre.

Antonello, Angelo, Rio Grande do Sul.
TEXTILE FIBRES.

Antonina, Commissão de, Paraná.
CASTOR SEEDS AND FIBRES.

Boris Freres, Ceará.
COTTON.

Boxwell Nephew & Co., Pernambuco.
COTTON.

Barbosa, Alexandre J., Paraná.
FIBRES.

Commissão do Estado, Piauhý.
COTTON.

Commissão do Estado, Alagoas.
COTTON AND COTTON SEED OIL.

Curitibanos, Commissão de, Sta. Catharina.
MEDICINAL PLANTS.

Camargo & Co., Affonso, S. Paulo.
COTTON.

Eugenio & Co., João, Paraná.
FIBRES.

Guedes, Manoel, S. Paulo.
OIL.

Garibaldi, Com. de, Rio Grande do Sul.
COTTON.

Hacaijhik, André, Paraná.
LINEN.

Haner, Roberto, Paraná.
FIBRES.

Intend, de Mossoró, Rio Grande do Norte.
COTTON, MEDICINAL PLANTS AND HIDES.

Iona & Krause, Pernambuco.
HIDES AND SKINS.

Kozak, José, Paraná.
LINEN AND OTHER FIBRES.

Machado, Dr. João, Maranhão.
TEXTILE PLANTS.

Magalhães Carlos B. de, S. Paulo.
FLAX.

Mattos, Joaquim F. de, Matto Grosso.
COTTON.

Oliveira & Co., Neves, Maranhão.
COTTON.

Patzlaff, Frederico, Rio Grande do Sul.
TEXTILE PLANTS.

Palmeira, Commissão de, Paraná.
LINSEED OIL.

Pinto, Manoel da Costa, Paraná.
FIBRES.

Pedrito, C. Municipal de D., Rio Grande do Sul.
RAW WOOL.

Rossback Bros., Pernambuco.
COTTON SEED OIL AND CASTOR BEANS.

Rodrigues, Honorato, Rio Grande do Sul.
RAW WOOL.

Ramos, José L., Rio Grande do Sul.
RAW WOOL.

Schiefler, Roberto, Sta. Catharina.
RAW WOOL.

Santos, J. Maria, Rio Grande do Sul.
RAW WOOL.

Sto. Antonio, Com. de, Rio Grande do Sul.
RAW WOOL.

Sounis, Leão, Paraná.
FIBRES.

Thims, João, Rio Grande do Sul.
TEXTILE PLANTS.

Wartha, W., Rio Grande do Sul.
TEXTILE PLANTS.

GROUP 96.

Useful Insects and their Products—Plant Diseases.

Almeida, Alberto de, Amazonas.
CANDLES AND WAX PRODUCTS.

Bufarah, Salomão, S. Paulo.
SERICICULTURE PRODUCTS.

Bataillard, S. A., S. Paulo.
APPLIANCE FOR DESTRUCTION OF ANTS.

Borges, Pedro A., S. Paulo.
APPLIANCE FOR DESTRUCTION OF ANTS.

Baldezarini, Luiz, S. Paulo.
RAW SILK.

Borba, Drogaria, S. Paulo.
RAW SILK AND COCOONS.

Conceição, Congregacão das Filhas da Immaculada, Sta. Catharina.
SILK.

Commissão do Estado, Sta. Catherina.
SILK.

Commissão do Estado, Paraná.
COCOONS, RAW SILK, ETC.

Commissão do Estado, Amazonas.
HONEY.

Curityba, Commissão de, Paraná.
RAW SILK, COCOONS, ETC.

Dom Bosco, Escola, Minas Geraes.
BEE HIVE.

Gomes, Josina, Violeta e Gloria, Rio Grande do Sul.
SILKS.

Huber, Henrique, Rio Grande do Sul.
HONEY.

Huber Senior, Pedro, Rio Grande do Sul.
HONEY AND WAX.

Jorge, Casemiro, Minas Geraes.
RAW SILK, THREADS AND COCOONS.

Kohlrausch & Co., Pedro, Rio Grande do Sul.
HONEY.

Kock, W., Paraná.
COCOONS AND RAW SILK.

Mechanica & Importadora, Comp., S. Paulo.
APPLIANCE FOR DESTRUCTION OF ANTS.

Manfroi, Mansuelo, Rio Grande do Sul.
RAW SILK AND COCOONS.

Madureira & Co., Amazonas.
CANDLES AND WAX PRODUCTS.

Miranda, Rodolpho, S. Paulo.
SILK.

Mandelli, Luiz, Rio Grande do Sul.
SILK.

Morandi, Frederico, Rio Grande do Sul.
SILK.

Mangoni, Julio, Rio Grande do Sul.
SILK.

Marinho, M. J., Rio de Janeiro.
RAW SILK.

N. S. da Conceição, Irmandade de, S. Paulo.
SERICICULTURAL PRODUCTS.

Nascimento, Asdrubal, S. Paulo.
SERICICULTURAL PRODUCTS.

Ritter & Filho, Rio Grande do Sul.
WAX.

Rodrigo Silva, Colonia, Minas Geraes.
SERICICULTURAL PRODUCTS.

Rosenstengel, José, Rio Grande do Sul.
HONEY AND WAX.

Schlabrendofl, Hugo von, Rio Grande do Sul.
SILK.

Sertãosinho, C. Municipal de, S. Paulo.
WAX.

Sarafona & Co., S. Paulo.
HONEY, WAX AND CANDLES.

Signorini, D. Angela M., Rio Grande do Sul.
RAW SILK AND THREADS.

Silvine & Ernst, S. Paulo.
HONEY.

Wartha, Wenceslau, Rio Grande do Sul.
RAW SILK AND COCOONS.

Zatti, Padre Domingos, Minas Geraes.
BEE HIVE OF IMPROVED DESIGN.

BRAZILIAN SECTION

DEPARTMENT OF FORESTRY

GROUPS 112 to 114

OF more than 2,000 scientifically studied and classified varieties of woods used for all sorts of purposes in Brazil about 1,200 are exhibited here, together with an enormous variety of medicinal, industrial and alimentary roots, barks, herbs, pods, nuts, fruits, waxes, rosins, straws, fibres, rubbers, gums, saps, etc.

According to Humboldt, Agassiz, St. Hilaire and other world renowned naturalists, the Brazilian forests are not only the largest but the richest and most luxuriant of the whole world.

The States of Amazonas, Bahia, Paraná, Sta. Catharina, Rio Grande do Sul and Minas Geraes have sent complete collections of samples of beautiful hard woods used for cabinet work and furniture, construction of buildings, naval construction, railroad ties, mining purposes, etc., besides many softer woods used for interior work, furniture, wooden-ware and many other purposes. A few samples of finished cabinet work, furniture, window frames and doors and some boards are also exhibited.

Of the barks, roots, gums, herbs, wools, fruits, waxes, seeds, nuts, etc., for medicinal and industrial purposes, such as dyeing, tanning, manufacture of varnish, oils, inks, etc., about 250 varieties are exhibited.

CAPT. J. CORDEIRO DA GRAÇA,
Commissioner in charge of Department
of Forestry.

A splendid collection of fibres, vines, rushes, straws, canes, etc., together with some of the products made from them, such as baskets, ropes, hammocks, brooms and brushes, mats, rugs, fans, hats, sieves, etc., is also shown.

Rubber of different kinds is exhibited in great profusion. This exhibit consists of several varieties and grades of common India rubber, maniçoba rubber, mangabeira rubber, of which the supply is practically inexhaustible, the rubber in sight in the Amazonas region alone being enough to supply the whole world for the next 600 years.

In 1903 the exportation from Manaos and Pará harbors amounted to over 30,000 tons; for the first six months of 1904, 17,500 tons passed through Pará on its way to Europe and North America. In the whole country are found numerous and beautiful varieties of palm trees, orchids and many odd tropical plants used for ornamental and other purposes.

The cipós or strong hard creepers, of beautiful cross sections, abound in Brazil and are used for fine cabinet and mosaic work. In the forests and prairies is found a great variety of edible fruits, many of them improving extraordinarily with transplantation, selection and cultivation.

Bamboo of many kinds and dimensions is plentiful in every part of the country.

GROUP 112.

Dutra, João, Rio Grande do Sul.
HERBARIUM.
A fine collection of botanical specimens from the State of Rio Grande do Sul, scientifically organized and classified.

Dietsch, Arthur, S. Paulo.
ORCHIDS.
PHOTOGRAPHS.

Jequié, C. Municipal de, Bahia.
CACTUS.

Mattas, I. Geral de, Rio de Janeiro.
PALM TREES, ETC.
BOOK AND ALBUM ON THE PALM TREES OF BRAZIL.

Rodrigues, Dr. Barbosa, Rio de Janeiro.
BOOK ON THE PALMS OF BRAZIL.
A splendid work. Mr. B. Rodrigues has devoted to this subject many years of careful investigation.

Schwacke, Dr. W., Minas Geraes.
HERBARIUM.
A very complete collection of plants of the State, carefully studied and classified.

GROUP 113.

Argollo, Cardoso, & Co., Bahia.
SAMPLES OF WOODS.

Alcobaça, C. M. de, Bahia.
SAMPLES OF WOODS.

Agricultura, Secretaria da, Bahia.
SAMPLES OF WOODS AND PRODUCTS OF FOREST INDUSTRIES.
Large and very interesting collection of woods and forest products found in the State.

Azevedo, Col. Paulo O., S. Paulo.
SAMPLES OF WOODS.

Agricola, Comp. Manufactureira e, Maranhão.
SAMPLES OF WOODS.

Arsenal de Marinha, Pará.
COAT-OF-ARMS IN WOOD.
This beautiful coat-of-arms was made at the Naval Arsenal of Pará; 102 different kinds of wood being used.

Arcuri & Spinelli, Minas Geraes.
SAMPLES OF WOODS AND BARKS.

Albuquerque, José A. de Souza, Matto Grosso.
SAMPLES OF WOODS.

Antonina, Com. M. de, Paraná.
LEAVES, FIBRES, WOODS, VINES.

Antonina, Com. M. de, Paraná.
ARTICLES MADE OF PINE KNOTS.

Anaman, Intend. de, Amazonas.
SAMPLES OF WOODS.

Annory, Intend. de, Amazonas.
BAMBOO CANES AND BASKETS.

Antimary, Intendencia de, Amazonas.
SAMPLES OF WOODS.

Angelo, A., Paraná.
SAMPLES OF WOODS.

Aguiar & Co., Amazonas.
PIASSAVA FIBRE AND BROOMS.

Azambuja, Graciano, Rio Grande do Sul.
PINE KNOTS.

Amorim, J. Guedes, Goyaz.
SAMPLES OF WOODS.

Barros, Henrique Paes de, Matto Grosso.
SAMPLES OF WOODS.

Barros, Col. A. B. M. de, Minas Geraes.
Samples of Woods.

Blumenau, Commissão M. de, Sta. Catharina.
Samples of Woods.

Borba, João A., Paraná.
Fibres and Ropes made of Fibres.

Barcellos, Intend. de, Amazonas.
Wood.

Borba, Intend. de, Amazonas.
Baskets.

Bolleto, Pedro F., Rio Grande do Sul.
Samples of Woods.

Beruty, Intend. de, Amazonas.
Woods.

Boa Vista, Fazenda, Amazonas.
Piassava Fibre.

Barros, Virgilio, Rio de Janeiro.
Woods.

Byerke & Co., C., Paraná.
Woods.

Cam. M. de Fonte Boa, Amazonas.
Barks for Medicinal and Industrial Purposes.

Costa & Co., Ferreira, Rio Grande do Sul.
Barks for Tanning Purposes.

Carvalho, T. Ignacio de, Amazonas.
Piassava Fibres and Brooms.

Campos, Vianna & Co., Rio de Janeiro.
Ropes, Etc., Made of Fibres.

Commissão do Estado, Sergipe.
Woods.

Cleodon y Plá., Parahyba.
Woods.

Chagas, Manoel, Maranhão.
Woods.

Caxias a Cajazeiras, E. de F., Maranhão.
Woods.

Commissão do Estado, Matto Grosso.
Woods.

Commissão do Estado, Paraná.
Beautiful table made of 114 differfnt kinds of wood from the State of Paraná.
Beautiful glove box made of 25 different kinds of wood from the State of Paraná.

Campos Novos, Com. M. de, Sta. Catharina.
Woods.

Curitybanos, Commissão M. de, Sta. Catharina.
Woods.

Curityba, Com. M. de, Paraná.
Articles made of Vines and Woods.
Beautiful table top with the Brazilian coat-of-arms in various woods.

Costa, M. Caniceiro da, Amazonas.
Articles in Wood.

Cachoeirinha, Educandos da, Amazonas.
Articles in Wood.
Articles in Fibres.
Fibres.
Rushes.
Articles in Rushes and Straws.

Carvoeiro, Intend. de, Amazonas.
Woods.

Codajaz, Intend. de, Amazonas.
Bamboo Canes.

Canutama, Intend. de, Amazonas.
Bamboo Canes.

Com. do Estado, Minas Geraes.
Woods.

Com. do Estado, Paraná.
Pine Knot, Wooden-ware and Baskets.

Com. do Estado, Minas Geraes.
Woods and Products.

Comino, J., Paraná.
Woods and Products.

Cordeiro, M. A., Paraná.
Woods.

Commissão do Estado, Paraná.
Woods.

Com. do Estado, Pará.
Woods.

Com. do Estado, Sta. Catharina.
Woods.

Com. de Brejaúva, Sta. Catharina.
Woods.

Campo Alegre, Com. de, Espirito Santo.
Woods.

Conchas, Commissão de, Paraná.
Woods.

Drechsler & Co., Max, Pernambuco.
Woods.

Descalvado, C. M. de, S. Paulo.
Woods.

Eugenio & Co., João, Paraná.
Aramina Fibres and Ropes.

Escola de Minas, Minas Geraes.
Woods.

Emingo, Angelo, Paraná.
Woods.

Feira de Santa Anna, C. Municipal de, Bahia.
Straw Baskets and Woodenware.

Frankenberg, Hugo Von, Sta. Catharina.
Woods.

Fonte Boa, Intend. de, Amazonas.
Woods.

Frith, W., Amazonas.
Nuts.

Ferreira, Alberto, Espirito Santo.
Woods.

Figueiredo, Dr. A. de, Amazonas.
Vegetable Wax.

Giusti & Co., Frederico, Rio Grande do Sul.
Ropes and Fibres.

Governo do Estado, Rio Grande do Sul.
Woods, Forest Products and Barks for Medicinal and Industrial Purposes.

A very large and interesting collection of forest products and woods of this State.

Guajaratuba, Intend. de, Amazonas.
Woods.

Gertum, Hugo, Rio Grande do Sul.
Bamboo.

Guimarães, Horacio G., Paraná.
Boards.
Samples of Woods.

Garazoni, A., Paraná.
Woods.

Gruber & Filho, Christiano, Rio Grande do Sul.
Woods and Products.

Gonçalves, Dr. Luiz C., Paraná.
Woods.

Gallote, Benjamin, Sta. Catharina.
Woods.

Guedes, Joaquim, Goyaz.
Woods.

Hucaijhik, André, Paraná.
Fibres and Ropes.

Holzman & Irmão, H., Paraná.
Objects in Wood.

Humaytá, Intend. de, Amazonas.
Articles in Fibres.
Fibres.

Ilhéos, C. M., de, Bahia.
Straw Baskets and Wooden-ware.

Itacoatiára, Intend. de, Amazonas.
Piassava, Brushes, Brooms.

Itajahy, C. M. de, Sta. Catharina.
Woods.

Iguassú, Com. da Fóz do, Paraná.
Woods.

Jequié, C. Municipal, Bahia.
Woods.

Jaguaruna, Com. M. de, Sta. Catharina
Woods.

Jardim, Nilo F., Amazonas.
Collection of Woods.

Kozak, José, Paraná.
Ropes made of Fibres.

Limeira, B. de, S. Paulo.
Woods.

Luz, Dr. Arlindo, Minas Geraes.
Woods.

Leite, J. L. Da Costa, Minas Geraes.
Textile Fibres.

Ladario, Arsenal de Marinha do, Matto Grosso.
Woods.

Lages, Com. M. de, Sta. Catharina.
Woods.

Labréa, Intend. de, Amazonas.
Fibres.

Lapa, Commissão de, Paraná.
Woods.

Montaurý, J., Rio Grande do Sul.
Barks for Industrial Purposes.

Mossoró, Intendencia de, Rio Grande do Norte.
Fibres and Barks for Medicinal and Industrial Purposes.
Hats.
Hammocks.
Wax, Etc.

Mendes & Filho, S. Paulo.
Woods.

Mamanguape, C. M. de, Parahyba.
Articles in Wood, Fibres, Etc.

Muricy, Cap. Leovigildo, Maranhão.
Woods.

Mendes, Correa & Co., Pará.
Woods.

Martins, Tancredo, Minas Geraes.
WOODS.

Martins, Octavio Minas Geraes.
WOODS.

Macedo, João Ribeiro, Paraná.
FIBRES AND ROPES.

Morretes, Com. M. de, Paraná.
WOODS.

Maués, Intend. de, Amazonas.
PIASSAVA, BASKETS.

Madeira, Col. Carlos, Amazonas.
NUTS.

Manicoré, Intend. de, Amazonas.
BASKETS.

Marcenaria Moderna, Amazonas.
WOODS.

Martins, Augusto, Amazonas.
WOODS.

Mello, Lourenço N. de, Amazonas.
NUTS.

Manaos, Intend. de, Amazonas.
RUSHES.

Moura, Intend. de, Amazonas.
FIBRES, RUSHES AND STRAWS.

Martins, Ignacio, Paraná.
POLISHED PINE KNOT.

Nascimento, Maciel, Paraná.
CUP MADE OF PINE KNOT.

Nocetti, Egydio, Sta. Catharina.
WOODS.

Oliveira, A. Ferreira de, Minas Geraes.
WOODS.

Olyntho, Dr. Antonio, Minas Geraes.
WOODS.

Oliveira, Aristides de, Paraná.
WOODS.

Porto Alegre, Intendencia de,
Rio Grande do Sul.
WOODS.

Porto Alegre, Penitenciaria,
Rio Grande do Sul.
WOODS.

Pereira, Dr. Huascar, S. Paulo.
WOODS.

Pyles & Irmão, E., S. Paulo.
WOODS.

Peixoto, Dr. Arthur, Alagoas.
WOODS.

Pedro & Co., Manoel, Pará.
WOODS.

Pereira, A. Napoleão da Rocha, Pará.
NUTS.

Paranaguá, Com. M. de, Paraná.
BASKETS, SIEVES, WOODS, ETC.

Penkelt, Rodolpho, Paraná.
BILLIARD CUES.

Ponta Grossa, Com. de, Paraná.
WOODS.

Pereira, A. C., Paraná.
BOARDS.

Penitenciaria, Bahia.
WOOD AND COCO-NUT SHELLS.

Rocha, A. Carneiro da, Bahia.
WOODS.

Rossbach Bros., Bahia.
WOODS.

Rotulo, Ltd., Minas Geraes.
WOODS.

Rocha, Raymundo T. G., Minas Geraes.
WOODS.

Reil, Gustavo, Sta. Catharina.
VASES MADE OF PINE KNOTS AND ROOFING BOARDS.

Rio Negro, Intend. de, Amazonas.
PIASSAVA BRUSHES AND BROOMS.

Rio Negro, Intend. de, Amazonas.
RUSHES.
ARTICLES MADE OF RUSHES AND STRAWS.

Respali, P., Paraná.
WOODS.

Ramos, G., Paraná.
WOODS.

Rio Claro, Colonia, Paraná.
OBJECTS IN WOOD.

Rocha & Co., Paraná.
WOODS AND PRODUCTS.

S. Francisco, C. M. de, Bahia.
WOODS.

S. Luiz Gonzaga, C. M. de,
Rio Grande do Sul.
ROPES OF FIBRES.

S. Leopoldo, C. M. de,
Rio Grande do Sul.
WOODS.

Steigleder Sobrinho, Germano,
Rio Grande do Sul.
WOODS.
FOREST PRODUCTS.
BARKS.
ARTICLES IN WOOD.
DOOR AND WINDOW FRAMES.

Silva Telles & Co., S. Paulo.
FIBRES AND FOREST PRODUCTS.

Soc. Paulista de Agricultura, Com. e Ind., S. Paulo.
WOODS AND OBJECTS OF WOOD.

Simão Dias, C. M. de, Sergipe.
WOODS.

Sabino, Manoel, Maranhão.
CALABASHES.

Senna, Dr. Nelson de, Minas Geraes.
OBJECTS IN WOOD.

Souza, Gabriel de Moraes, Matto Grosso.
WOODS.

Seefeldt, Frederico, Sta. Catharina.
WOODS.

S. Francisco, Commissão de,
Sta. Catharina.
WOODS FOR TANNING PURPOSES.

Sounnis, Leão, Paraná.
FIBRES.

S. Felippe, Intend. de, Amazonas.
BASKETS.
PALM LEAVES.
FIBRES.

S. Bento, C. M. de, Sta. Catharina.
Woods.

Schumann, Carlos, Paraná.
Beautiful Table Top in mosaic of various woods.

Sperandini, João, Paraná.
Woods.

Santa Isabel, Intend. de, Amazonas.
Nuts.

Santo Antonio, Intend. de, Amazonas.
Piassava Fibres, Straws, Rushes.

Silves, Intend. de, Amazonas.
Woods.
Vines.

Schneider, Carlos, Sta. Catharina.
Dried Flowers and Leaves.

S. José dos Pinhaes, Com., Paraná.
Woods, Wooden Wares.

Silva Virgilio X. da, Paraná.
Woods and Products.

Silva, João, Rio Grande do Sul.
Woods.

S. Bento, C. M. de, Paraná.
Woods.

Tolentino, Marcionilo, S. Paulo.
Copal Vases.

Teffé, Intend. de, Amazonas.
Bamboo Canes.

Urucará, Intend. de, Amazonas.
Woods.

Uricurituba, Intend. de, Amazonas.
Piassava Fibres, Straws, Rushes.

Ypiranga, Com. de, Paraná.
Woods and Products.

GROUP 114.

Antonina, Com. M. de, Paraná.
Barks for Medicinal and Industrial Purposes.

Aguiar, Antonio Gomes, Matto Grosso.
Medicinal Herbs.

Anaman, Intend. de, Amazonas.
Rubber.

Anayaz, Intend. de, Amazonas.
Rubber and Sap.

Agricultura, Sec. da, Bahia.
Plants, Leaves, Seeds, Barks, Vines, Roots, Rubbers, Oils, Rosins, Nuts, Pods for Medicinal and Industrial Purposes.

Argollo, Cardoso & Co., Bahia.
Mangabeira Rubber, Gums, Rosins, Piassava Fibre, and Nuts, Maniçoba Rubber, Wax, Vegetable Wool, Etc.

Almeida Filho, João B. de, Matto Grosso.
Rubber and Herbs for Medicinal Purposes.

Boris Freres, Ceará.
Rubber, Seeds, Roots, Wax, Rosins.

Berury, Intend. de, Amazonas.
Rubber.

Barreirinha, Intend. de, Amazonas.
Leaves, Roots and Herbs for Medicinal and Industrial Purposes.

Baptista, Nilo, Amazonas.
Medicinal Beans.

Bodstein, Jorge, Matto Grosso.
Vanilla.

Bastos, Celestino Alves, Matto Grosso.
Medicinal Herbs.

Bicudo, Padre A. Manoel Matto Grosso.
Medicinal Herbs.

B. Esperança, C. M. de, S. Paulo.
Mangabeira Rubber.

Calmon, C. M., Bahia.
Seeds, Barks and Vegetable Wool.

Cannavieiras, C. M. de, Bahia.
Piassava Fibres and Vegetable Wool.

Caetité, C. M. de, Bahia.
Vegetable Wool.

Codajaz, Intend. de, Amazonas.
Rubber.

Commissão do Estado, Paraná.
Barks, Leaves, Rosins, Etc., for Industrial and Medicinal Purposes.

Commissão do Estado, Pará.
Barks, Leaves, Rosins, Rubber, Etc., for Industrial and Medicinal Purposes.

Commissão do Estado, Parahyba.
Barks for Medicinal Purposes.

Camille & Co., Th. Levy, Amazonas.
Medicinal Beans and Plants.

Costa, Dr. Jonas C. da, Matto Grosso.
Medicinal Seeds.

Couto, Pedro C., Matto Grosso.
Medicinal Products.

Costa, Pedro Celestino C. da, Matto Grosso.
Medicinal Herbs.

Carvalho, Dr. A. A. Figueiredo, Parahyba.
Plants, Seeds, Etc., for Medicinal and Industrial Purposes.

Conceição, Com. M. de, Parahyba.
Medicinal Seeds.

Commissão de Fonte Boa, Amazonas.
Medicinal Barks.

Campos, Antonio, Maranhão.
Rosins, Barks.

Commissão do Estado, Matto Grosso.
Rubber, Herbs, Barks, for Medicinal and Industrial Purposes.

Figueiredo, Dr. A. G. de, Amazonas.
Vegetable Wax.

Feira de Sant' Anna, C. Municipal de, Bahia.
Oils, Barks and Leaves. Nuts, Coco-nuts, Roots, Plants for Industrial and Medicinal Purposes.

Freitas, J. M. Torres de, Amazonas.
Saps and Rubber.

Góes, Dr. M. D. Correia de, Parahyba.
Medicinal Plants.

Guimarães & Co., Paraná.
Matte and Barrels.

Governo do Estado, Rio Grande do Sul.
Rosins, Barks, Herbs, Vines for Industrial and Medicinal Purposes.

Gonçalves, Umbelino, Bahia.
Piassava Fibres.

Humaytá, Intend. de, Amazonas.
Barks, Oils.

Ilhéos, C. Municipal, Bahia.
Barks and Leaves for Industrial and Medicinal Purposes.

Itacoatiára, Intend. de, Amazonas.
Rosins.

Jequié, C. Municipal de, Bahia.
Fibres, Oils, Maniçoba Seeds and Rubber, Barks, Fruits, Rosins, Gums, Plants, Leaves, Saps, Etc., for Medicinal and Industrial Purposes.

Jardim, Nilo F., Amazonas.
Barks, Rosins, Vanilla Pods, Etc.

Labrea, Intend. de, Amazonas.
Ouriço Nuts.

Leão Junior Agostinho E. de, Paraná.
Matte.

Lapa, Com. M. de, Paraná.
Medicinal Herbs.

Montenegro, Col. J. C. Brazil, Pará.
Rubber, Med. Plants and Bark.

Mendes Pereira, Padre Manoel, Minas Geraes.
Barks for Medicinal Purposes.

Maués, Intend. de, Amazonas.
Guaraná Powder and Paste.

Manicoré, Intend. de, Amazonas.
Guaraná Powder and Paste.

Manaos, Intend. de, Amazonas.
Oils and Sorva Sap for Industrial Purposes.

Matte Larangeira, Comp., Matto Grosso.
Matte and Barrels.

Nina, Heraclito, Maranhão.
Rosin, Barks for Industrial Purposes.

Oliveira, Dr. Luiz, Parahyba.
Carnaúba Wax.

Orlando & Irmãos, Matto Grosso.
Rubber and Medicinal Herbs.

Oliveira, Dr. Matheus de, Parahyba.
Medicinal Rosins.

Paulista de Agric. Com. e Industria, Soc., S. Paulo.
Barks, Leaves, Roots, Rubber, Etc., for Industrial and Medicinal Purposes.

Porto Alegre, C. M. de, Rio Grande do Sul.
Rosins, Barks, Herbs, Vines, Etc., for Industrial and Medicinal Purposes.

Pereira, Mawson & Co., Bahia.
Rosins for Industrial Purposes.

Porto Seguro, C. M. de, Bahia.
Piassava Fibres and Vegetable Wool.

Pacheco, Romulo M., Parahyba.
Medicinal Plants.

Ribeiro, Diogo M., S. Paulo.
Medicinal Roots.

Rossbach Bros., Bahia.
Resins for Industrial Purposes.

Rio Branco, Intend. de, Amazonas.
Roots, Barks and Saps for Medicinal and Industrial Purposes.

Rotulo, Ld., Minas Geraes.
Medicinal Barks.

S. Bento, Com. de, Sta. Catharina.
Barks, Rasps, for Industrial Purposes.

S. Felippe, Intend. de, Amazonas.
Ouriço Nuts for Industrial Purposes.

S. Gabriel, Intend. de, Amazonas.
Leaves, Roots and Herbs for Medicinal Purposes.

Silves, Intend. de, Amazonas.
Leaves, Roots and Herbs for Medicinal Purposes.

Silva, Virgilio X. da, Paraná.
Barks for Tanning Purposes.

S. P. de Olivença, Intend. de, Amazonas.
Rubber.

S. Simão, C. M. de, S. Paulo.
Mangabeira Rubber.

S. Leopoldo, C. M. de, Rio Grande do Sul.
Rosins, Barks, Herbs, Vines for Medicinal Purposes.

S. Luiz Gonzaga, C. M. de, Rio Grande do Sul.
Fibres.

Sá., C. C. Fernandes de, Amazonas.
Rubber.

Santo Antonio, C. M. de, Rio Grande do Sul.
Medicinal Seeds.

Torres, F. Rangel, Parahyba.
Medicinal Roots.

Vieira Filho, H. José, Matto Grosso.
Medicinal Herbs.

Vianna, Alvaro, Matto Grosso.
Medicinal Herbs and Vegetable Wool.

BRAZILIAN SECTION

DEPARTMENT OF

MINES AND METALLURGY

GROUPS 115 to 119

THE mineral resources and wealth of Brazil are well represented by a large and varied collection of specimens.

Among many other equally valuable products may be mentioned gold, silver, lead, tin, copper, graphite, zinc, iron in nearly all its varieties of occurrence, manganese, coal, plombagine, mica, marble, clays, ochres, and other natural mineral paints, monasite sands, platinum sands, asbestos, talcum, alum, aluminum, building stones, limestones, bituminous shales, turf, cinnabrium, saltpetre, common salt, rock and quartz crystals, grés and sandstones, mineral waters, eruptive rocks, slate, gypsum, cadmium, chromium, feldspath, scorodites, chalk, whetstones, abrasive stones, agates, amethysts, silex, pumice-stone, basalt, asphalt, emery sands, tripolitan sands, iceland-spath, kaolin, mineral oils,

MR. ANTONIO OLYNTHO,
Commissioner in charge of Department of Mines and Metallurgy.

malachites, melaphyr, amorphous quartz, serpentine, cassiterite, diamond and gold gravels and sands, mercury and topaz. A few photographs and plans of mines and machines, etc., are shown.

Among these, the minerals that are regularly mined are gold, silver, diamonds, manganese, copper, monasite, coal, iron, mica, oils, ochres, asbestos, crystals, saltpetre, marble and building stones, limestones, talcum, mercury, salt, etc.

Gold is found in abundance in the States of Bahia, Minas Geraes, S. Paulo, Río Grande do Sul, Matto Grosso and Goyaz. Among other important Mining Companies conducting a lucrative business in the exploitation of gold mines are the St. John Del Rey Mining Company (Mines at Morro Velho), The Ouro Preto Gold Mining Company (Mines at Passagem), The Rotulo L'd., The Aurifera of Minas Geraes, The Caethé, The Velloso, The Tassaras, The Lavras, The Padre Faria, and others all in the State of Minas Geraes. In the State of Bahia gold has been mined for over 200 years at Assuruá, Chapada, Río Verde, Serra do Andarahy, Serra do Aruba, Río Bromadinho, Serra da Jacobina, Río Itapicurú, Serra do Sincorá, Gloria, Mandiocal, Morro do Fogo, Paramirim, Pumbú, Río Grande, Bom Jesus, Serra da Itiuba and many other places.

In S. Paulo in the Mantiqueira Mountains and at Sorocaba. In Río Grande do Sul at Serro Branco, Bom Retiro, S. Gabriel, Vaccacahy, D. Pedrito, Lavras, Barcellos, S. Sepé, Cerrito and other places, where a large number of mines are in operation.

In Matto Grosso on the Rivers Coxim and Juruá (The Trans-Pacific Brazil Mining Company), the Coxipó River, the Jaurú River, the Paraguay River, Cuyabá, the Río das Mortes, Brumado, Arinos, Cocaes, the Coxipó-Assú River, Lavrinhas, etc.

Diamonds have been mined regularly ever since the discovery of Brazil, in many places in the States of Bahia, Minas Geraes and Matto Grosso, as also rubies and other precious gems. In nearly all of the other States of Brazil diamonds have been found occasionally.

Brazilian diamonds are noted for their brilliancy and clearness of a pure white. Many beautiful colored diamonds have also been found in Brazil and some of the largest diamonds existing in the crown jewels of Europe came from Brazil.

Very rich deposits of carbonate are being exploited in Bahia. Silver is found also in different States of Brazil but in Bahia only it is mined on a large scale. Manganese, noted for its high metallic percentage of pure manganese and complete absence of phosphorus and sulphur, is mined and exported in large quantities from Río Grande do Sul, Bahia, Minas Geraes, Paraná and Matto Grosso, the most important mines being in Minas Geraes and Matto Grosso.

Copper is found in different varieties and mined in Ceará, Bahia, Minas, S. Paulo and Río Grande do Sul.

Monasite sands in abundant deposits are found along the coast of the State of Bahia and Espirito Santo and in the interior of the States of Río de Janeiro and Minas Geraes.

Coal has been very little explored in Brazil, the principal reason being the lack of capital to conduct investigations. It is known to exist in large quantities at many places. The Coal Formation extends along the coast of Brazil from Pará to the southern part of the State of Bahia, where mineral oils and bituminous shales are being extracted at Marahú. Then there is a break and the formation reappears in the northern part of S. Paulo and extends to the southern part of the State of Rio Grande do Sul.

In the State of Paraná several beds have been discovered. In the southern part of the State of Santa Catharina, the formation is very much developed at Tubarão and Araranguá reaching down to the northern part of Río Grande do Sul, where there is another break extending to the Jacuhý River Basin, forming the great Jacuhý Carboniferous Basin, 170 miles long and averaging 7 to 13 miles in breadth, as far as the beds can be traced.

Another smaller basin, that of Herval, is separated from the Jacuhý Basin by a range of granite hills. On the upper Vaccacahy River are found beds of bituminous shales also. Finally, in the southern part of the State there are the Candiota and Rio Negro Basins, which seem to extend into Uruguay.

In all the different places where it has been possible to examine the coal it has proved to be of very good quality. Many indications of the existence of coal have been found in other states also in the interior of the country.

The location of the coal formation and outcrops, the extraordinarily good facilities for cheap labor and transportation, both by land and water, the immense deposits of excellent qualities of iron, manganese and other ores will make coal mining in Brazil one of the best investments for capital in the world.

At present one company only has been mining coal for over thirty years at Arroio dos Ratos in the Jacuhý Basin.

Iron exists in enormous quantities; in fact it might be said, whole mountains of it, in a great number of varieties, exist especially in the States of Minas Geraes and some of the Southern States.

The cost of coal makes it impossible to utilize the richest iron ores found in the country and the siderurgical industry is therefore carried on on a very small scale, existing only in places where wood is plentiful, charcoal being used for fuel. Among other rich iron ores, the following are abundant: specular oligistic, very compact, magnetic, very pure and of the highest value, limonite, hematite itabirite, jacutingas, oxides, chromic iron, etc.

Many other minerals, such as nickel, cobalt, tungsten, arsenic, molybdenum, azurite, thorium, cadmium, emeralds, sapphires, blende, antimonium, garnets, opals, etc., have been found in different parts of Brazil.

The splendid exhibit of Brazil in this Department shows what golden opportunities there are for the investment of foreign capital in that country, of which English, French and Belgian companies are already taking advantage.

GROUP 116.

Minerals and Stones and their Utilization.

Antonina, Com. M. de, Paraná.
OCHRES, IRON AND MANGANESE ORES, CHALK.

Almeida, Servulo de, Rio Grande do Sul.
CLAY SCHIST WITH IMPRESSIONS, AGATES.

Argollo, Cardoso & Co., Bahia.
GRANITE, CALCAREOUS STONES, COPPER ORES, MANGANESE ORES, CADMIUM, OCHRES, PLUMBAGO AND BITUMINOUS SHALES.
All found in the region traversed by the S. Francisco Railroad.

Azambuja, Graciano A., Rio Grande do Sul.
PETRIFIED WOOD.

Agricultura, Sec. da, Bahia.
MONASITE SANDS, OCHRES.
These sands are found in immense deposits along the coast of Bahia.

Aurifera, Comp., Minas Geraes.
GOLD QUARTZ, FROM THE HONORIO BICALHO MINES.

Azevedo, Col. H. F. Penna de, Amazonas.
CLAY, CALCAREOUS STONES AND MANGANESE ORES.

Aracajú, Com. M. de, Sergipe.
COMMON SALT.

Bretas, Affonso, Minas Geraes.
IRON ORES. (OLIGISTIC AND MAGNETIC).

Brant, João, Minas Geraes.
DIAMOND GRAVEL AND CRYSTALS FROM THE DIAMANTINA MINES.

Brant, Major F., Minas Geraes.
DIAMOND GRAVEL FROM THE DIAMANTINA MINES.

Belgo Bresilienne Lavras, Soc., Rio Grande do Sul.
WOLFRAMITE.

Barcellos, Intendencia de, Amazonas.
GRANITE.

Belga de Tripuhý, Comp., Minas Geraes.
CINNABRIUM AND CINNABRIC ORES.

Brazilian Diamond Fields Corp. Ld., Bahia.
DIAMOND GRAVELS.

Diamonds have always been found in large quantities in this State; some of them have been considered the largest and finest in the world.

Carvalho, Dr. A. A. de Figueiredo, Parahyba.
IRON ORE, COMMON SALT, ROCK CRYSTAL, ASBESTOS.

Cariry, Cons. Mun. de S. João de, Parahyba.
MICA AND VARIOUS ORES.

Castello Branco, A. F., Minas Geraes.
MAGNETIC IRON ORES FROM SABARÁ.

Campos, Fortunato P., Minas Geraes.
GOLD ORES.
From the Lages, Queimada and Ouro Falla Mines.

Correa, F. Vargas, Minas Geraes.
FELDSPATH ORTHOSE.

Com. do Estado, Sta. Catharina.
COAL.
Several deposits of first-class coal have been found in the southern part of the State.

Com. do Rio Grande, Rio Grande do Sul.
CRYSTAL, AGATES, COAL, MARBLE.

Com. do Estado, Minas Geraes.
ZINC.
GOLD.
COPPER ORES.
SCORODITES.
MICA AND MARBLE ORES.

Coelho, Dr. H., Rio de Janeiro.
MARBLE.

Castro, Col. Antonio, Minas Geraes.
ROSE QUARTZ.
MICA.
PLUMBAGO.

Capelle, Dr. Alberto Vande, Rio Grande do Sul.
GOLD PYRITES AND QUARTZ FROM THREE DIFFERENT MINES.
BED ROCK FROM THE LAVRAS MINE, WOLFRAMITE AND CASSITERITE.

Carcano, Cezar, Matto Grosso.
OLIGISTIC IRON AND MANGANESE ORES.

Cunha Junior, M. Francisco da, Amazonas.
CLAYS.
CHALK.
IRON ORES.
PETRIFIED WOOD.

Carvoeiro, Intend. de, Amazonas.
SANDSTONES.

Chaves, Dr. José, Rio Grande do Sul.
GLANCE AND CARBONATE OF COPPER.
Several rich copper mines are being explored near Caçapava.

Caçapava, Intend. de, Rio Grande do Sul.
LIME, MARBLE.

Caxias, Intend. de, Rio Grande do Sul.
GRAPHITIC CLAYS.

Correia, Doutor L., Rio Grande do Sul.
CLAYS.

Com. do Estado, Piauhý.
FOSSIL FISHES, FULLER'S EARTH, ALUM, SLATE, SALTPETRE, VARIOUS ORES AND SANDS.

Costa, José Vicente da, Minas Geraes.
MARBLE.

Cotta, Col. José G. de Almeida, Minas Geraes.
CALCAREOUS ROCKS.
GOLD QUARTZ.
GRAPHITE.
From the Catta Preta Mines.

Caxambú, Empreza de Aguas, Minas Geraes.
MINERAL WATERS.
From several Springs, recommended for stomach and skin diseases.

Central do Brazil, E. de F., Minas Geraes.
MARBLE FROM RODRIGO SILVA.

Curytiba, Com. M., Paraná.
ALUM.
CALCAREOUS ROCKS.
ASPHALT.
SILEX.

Cruz, Porhyrio Sandy da, Paraná.
EMERY SAND.

Castro, Com. M., Paraná.
GRANITE AND CLAY.

Coelho, Dr. E., Rio de Janeiro.
COMMON SALT.
From the extensive salt works of Cabo Frio.

Cuité, Com. M. de, Parahyba.
KAOLIN.
CRYSTALS AND VARIOUS ORES.

Campos, Col. Symphronio, Minas Geraes.
Gold Ores from the Caethé Mines.

Dias, Major R. de Paula, Minas Geraes.
Chromic Iron Ore.
Gold Ores and Magnetic Iron from the Tassara and Velloso Gold Mines.

D'Avila, Pantaleão Marques, Rio Grande do Sul.
Iron Ores, Oligistic and Magnetic.

Daudt Filho, João, Rio Grande do Sul.
Gold Quartz.

Dom Pedrito, Intend. de, Rio Grande do Sul.
Gold Quartz.
Carboniferous Schists and Carboniferous Ores.
Feldspath, Clay Noduls, Ferruginous Ores.

Debize, Luiz, Rio Grande do Sul.
Slate.

Dahne, Dr. Eugenio, Rio Grande do Sul.
Crystals and Agates.

Dreher, Edmundo, Rio Grande do Sul.
Agates.

Espirito Santo, Padre J. A. do, Minas Geraes.
Cinnabrium and Other Ores.

Esperança, Usina, Minas Geraes.
Iron Ores.

Escola de Minas de Ouro Preto, Minas Geraes.
Fine collection of 332 samples of ores and minerals, all from the Ouro Preto District, including ores of iron, zinc, gold, manganese, oligist, itabirites, scorodites, epidotites, chromium, etc.

Extractiva Mineral do Brazil, Comp., Bahia.
Mineral Oils, Bituminous Shales.
A very large deposit exists at Marahú, on the seacoast.

Ferraz, Luiz Caetano, Minas Geraes.
Gold Ores and Other Ores from Palma and Villa Nova Mines.

Faria, Major Antonio, Minas Geraes.
Gold Ores and Quartz and Pyrites from the P. Faria Mines.

Fortes, Dr. Carlos da Silva, Minas Geraes.
Asbestos.

Feira de Sant' Anna, Com., M. da, Bahia.
Clay and Products.

Furtado, Dr. Manoel A., S. Paulo.
Samples of Aluminum.

Figueiredo, Antonio C., Matto Grosso.
Calcareous Rock.

França, Jeronymo T., Rio Grande do Sul.
Collection of Silicious Crystals with Water.

Felicissimo, Major Arthur, Minas Geraes.
Splendid Collection of 316 Samples of Ores and Minerals, All Found in the State.

França, Ignaclo, Paraná.
Coal from a Deposit Found at Imbituva.

Flack & Co., Cezar, Rio de Janeiro.
Ochres, Talcum, Kaolin and Gypsum.

Figueiredo, Urbano de, Parahyba.
Calcareous Stones with Interior Impressions of Mollusks.

Gomes, Dr. Almeida, Minas Geraes.
Gold Quartz from the Cibrão Mines.

Gandarella, Comp., Minas Geraes.
Marbles.

Gonçalves Ramos & Co., Empreza, Minas Geraes.
Manganese Ores from Gagé Mines.

Gomes, Leopoldo, Minas Geraes.
Diabatic Rocks.

Governo Federal, E. Santo.
Monasite Sands.
From these sands are extracted cerium and thorium, metals used in immense quantities in the manufacture of the well-known Welsbach incombustible mantles used for incandescent lights. There are enormous deposits of these valuable sands in the States of E. Santo, Bahia and Rio de Janeiro.

Gomes & Co., Otero, Rio Grande do Sul.
Manganese Ores.

Governo do Estado, Rio Grande do Sul.
Iceland-Spath, Granite, Gold Nuggets and Ores (quartz and schists) calcareous rocks, collection of agates, carboniferous schists, collection of crystals, mica, emery, oligistic iron, magneticiron, glance, carbonate of copper, asbestos, gold quartz with molybdenum, manganese ores, ochres, petrified wood, building stones, marble, basalt, amorphous quartz, prepared ochres, copper ores, polished agates, and malachites, rock crystal, amethysts.

Gravatahý, Intend. de, **Rio Grande do Sul.**
GRÉS.

Galvão, Dr. Felippe R., **Matto Grosso.**
MICACEOUS CLAYS AND LIMONITIC OCHRES. (TABATINGA).

Governo do Estado, **Matto Grosso.**
GOLD NUGGET.
Weighing nearly half a pound found in one of the streets of the city of Cuyabá the Capital of Matto Grosso, one of the richest States of Brazil in minerals and precious stones.

Guedes, Francisco de Paula, **Rio Grande do Sul.**
TRIPOLITAN SANDS.

Gordon, John, **Bahia.**
MANGANESE ORES.

Huebel, J., **Paraná.**
GRÉS.

Jardim, Col. A. E. de Assis, **Minas Geraes.**
GOLD ORES.

Jesus, Dr. Palhano de, **Maranhão.**
CALCAREOUS STONES AND LIME.

Kluppe, Eduardo, **Paraná.**
ABRASIVE STONE.

Lima, Dr. Augusto, **Minas Geraes.**
IRON.
GOLD.
ZINC.
COPPER AND MANGANESE ORES.

Lopes, Dr. Prado, **Minas Geraes.**
COLLECTION OF SAMPLES OF OLIGISTIC IRON, ETC.
GOLD PYRITES WITH SCORODITE CRYSTALS.

Lima, Dr. Gomes de, **Minas Geraes.**
MARBLE AND SERPENTINES.

Luiz, Casemiro Ribeiro, **Minas Geraes.**
OCHRES.

Luciano, Joaquim, **Minas Geraes.**
OCHRES.

Luce & Co., Archer, **Rio Grande do Sul.**
COPPER ORES, GLANCE AND CARBONATE, FROM THE PRIMAVERA MINES.

Lages, Com. M. de, **Sta. Catharina.**
BUILDING STONES.

Lambary & Cambuquira, Empreza, **Minas Geraes.**
MINERAL WATERS.

Lima, Braulio W., **Paraná.**
MARBLE.

Lapa, Com. M. de, **Paraná.**
GRÉS.

Lorena, Com. M. de, **S. Paulo.**
TALCUM.

Martha, Rutilio A., **Minas Geraes.**
MICA.

Murse, Pedro, **Minas Geraes.**
OCHRE.

Machado, Virgilio, **Minas Geraes.**
LIMESTONES AND LIME.

Minas de S. Jeronymo, Comp. E. de F. e, **Rio Grande do Sul.**
COAL.
Of the well defined coal formation extending from S. Paulo to Rio Grande do Sul the richest deposits seem to be in the latter State. Several important basins, such as those at Candiota, Herval, Arroio dos Ratos, etc., have been explored and that of Arroio dos Ratos has been found to extend over 170 miles, with an average breadth of from 7 to 13 miles, the coal being of very good quality.

Mines de Cuivre de Camaquam, Soc. des, **Rio Grande do Sul.**
COPPER ORES, ROCKS, GLANCE, PYRITES, CONCENTRATES.
This company owns large mines at Camaquam, which are very rich.

Mines d' Or du Cerrito, Soc. des, **Rio Grande do Sul.**
GOLD ORES.

Moura, Intend. de, **Amazonas.**
SANDSTONE.

Macedo, João Ribeiro de, **Paraná.**
MINERAL WATERS AND OCHRES.

Morro da Mina, Comp., **Minas Geraes.**
MANGANESE ORES.
Splendid samples from Lafayette Mines, weight of one of the samples 6,351 lbs.

Macedo, Col. Joaquim Pereira de, **Paraná.**
QUARTZ CRYSTALS.
OCHRES.
COAL.
COPPER ORES.
Coal has been found lately in various places in the State of Paraná. The copper is from the rich Copper Mines of Guarapuava.

Marcos, F., **Paraná.**
MARBLE.

Mercer, F. H., **Paraná.**
MERCURY.

Mossoró, Intend. de, **Rio Grande do Norte.**
LIME, SULPHATE OF LIME.
GYPSUM.

Macáu, Intend. de, Rio Grande do Norte.
COMMON SALT.
The preparation of salt is one of the main industries of this State and the salt works are complete and of the most modern type.

Meira e Sá, Dez. F. de Salles, Parahyba.
VARIOUS ORES.

Margarida, Comp. Salinas, Bahia.
COMMON SALT.

Netto, Guilherme G., Minas Geraes.
LIMONITE, IRON ORES AND PYRITES FROM THE ANTONIO PEREIRA MOUNTAINS.

Nogueira, J. Baptista B., Minas Geraes.
THIRTY-THREE VARIETIES OF OCHRES FROM OURO PRETO.

Nazareth, Euclydes, Amazonas.
GRANITE.

Natal, Fazenda do, Bahia.
CLAYS AND OCHRES.

Ouro Preto Gold Mines of Brazil, Ld., Minas Geraes.
GOLD AND OTHER ORES FROM THE PASSAGEM MINES.

Olyntho, Dr. Antonio, Minas Geraes.
CALCAREOUS STONES, GOLD AND DIAMOND GRAVEL.

Oliveira, Col. Antonio Vaz de, Rio Grande do Sul.
CARBONIFEROUS SCHISTS.

Otta, Carlos A., Rio Grande do Sul.
TURMALINE, QUARTZ, FERRUGINOUS GOLD QUARTZ.

Oliveira, Dr. Luiz de, Parahyba.
VARIOUS ORES.

Oliveira, H. José de, Paraná.
GRANITE AND CLAY.

Oliveira, Julio Basilio de, S. Paulo.
ABRASIVE STONES.

Oliveira, J. Custodio de, Minas Geraes.
VARIOUS ORES.

Paula, Dr. Joaquim F. de, Minas Geraes.
CINNABRIUM AND COPPER ORES, CHALCOPYRITES, ETC.

Pimentel, Col. Affonso, Minas Geraes.
GOLD AND OTHER ORES AND OCHRES FROM S. JOÃO DEL REY.

Paula, Zacarias de, Paraná.
COPPER FROM THE GUARAPUAVA MINES.

Pereira & Nelson, S. Paulo.
MICA.
OCHRES.
IRON ORES.

Porto Alegre, Intend. de, Rio Grande do Sul.
GRANITE, SLATE, WHETSTONES, AMETHYSTS, PETRIFIED WOOD.

Porto, Pedro Alves, Rio Grande do Sul.
COLLECTION OF CRYSTAL AMETHYSTS.
Beautiful and large amethysts are found near Quarahy.

Paranaguá, Com. M. de, Paraná.
CLAYS AND KAOLIN.
MANGANESE ORES.

Perotto, Pedro, Paraná.
ABRASIVE STONES.

Ponta Grossa, Com. M., Paraná.
SILICIOUS SAND AND SLATE (PURPLE AND BLUE).

Penteado, Luiz Antonio, Paraná.
PUMICE STONE.

Palhares, Grühn & Co., Rio de Janeiro.
MINERAL WATER, SALUTARIS.

The Springs producing this delicious and medicinal table water are located at Parahyba do Sul. This water is specially recommended for stomach, liver, kidney and bladder troubles.

Queiroz, Hermogenes J., Minas Geraes.
IRON ORES.

Quarahy, Intend. de, Rio Grande do Sul.
CLAYS, PURPLE AND YELLOW, CRYSTALS, AGATES.

Queluz de Minas, Comp. Manganez, Minas Geraes.
MANGANESE ORES.
Beautiful samples from Queluz Mines, one of them weighing 1,320 lbs.

Rotulo, Ltd., Minas Geraes.
MAGNETIC IRON AND GOLD ORES.

Ramos, D. Amelia da Silva, Minas Geraes.
LIME AND SANDS.

Rocha, Raymundo T. G., Minas Geraes.
COPPER AND LEAD ORES FROM SETE LAGOAS.

Rocha, Americo T. G., Minas Geraes.
OCHRES, KAOLIN AND SILVER ORES FROM SETE LAGOAS.

Richardson, C. J., Minas Geraes.
GOLD ORES FROM THE JUCA VIEIRA MINES.

Rezende, Luiz de, Minas Geraes.
CRYSTALS.
A very fine collection.

Rowe & Mosselmann, Bahia.
Mica, Manganese Ore.
Graphite.
Plumbago, Various Ores and Minerals.
The State of Bahia is one of the richest mineral states of Brazil. Besides the above minerals, gold, diamonds and silver are plentiful in the State.

Rosat, Augusto, Rio Grande do Sul.
Gold Ores and Nuggets, Pyrites, Agates from the Bom Retiro and Rosat Mines.

Ribeiro, Francisco A., Matto Grosso.
Gold.
Diamonds.
Grés.
All from the Coxim and Jaurú Rivers. The formation is distinctly volcanic; eruptive rocks, melaphyr, porphyry, etc., are abundant; many petrified trees have also been found. The gravel is composed of oolith of lime, silex, porphyry, trachyte, quartz and sands. Besides gold and diamonds are found also tin, iron, sulphur, etc., rubies, topaziums, turquoises, lapis-lazuli and other precious stones and metals.

Rocha José Victorino da, Rio Grande do Sul.
Ochres and Gold Nuggets.
Carboniferous Schists.

Rio Negro, Com. M. de, Paraná.
Whetstone.

Rodovalho, Antonio Proost., S. Paulo.
Various Ores.

Soucasaux, Francisco, Minas Geraes.
Chromic Iron Ores—Gold Ores and Magnetic Iron.

Silveira, Cunha, Sta. Catharina.
Iron Ores.
Very abundant in this State, where coal deposits have just been discovered.

S. Francisco, Com. M. de, Sta. Catharina.
Lime made of Shells.

S. Gabriel, Municipio de, Rio Grande do Sul.
Marble, Copper Ores, Pyrites from the Bom Retiro Mines.

Severo, Pedro de B., Rio Grande do Sul.
Gold Quartz.

S. A. da Patrulha, Int. de, Rio Grande do Sul.
Eruptive Rocks, Several Varieties.

Secco, Eduardo, Rio Grande do Sul.
Crystals.

Senna, Dr. J. C. Costa, Minas Geraes.
Stoltzite and Scheelite.

Scheling, Augusto, Paraná.
Abrasive Stone.

Santos, João I. dos, Rio de Janeiro.
Mica.

St. John d'El Rey Gold Mining Company, Minas Geraes.
Gold Ores from the Morro Velho Mines.
The largest and best mine in Brazil.

Silveira, Dr. Alvaro A. da, Minas Geraes.
Talcum, Plombagine and Mica from S. João del Rey Mine.

Soares, Majors C. B. and M. B., Minas Geraes.
Manganese Ores and Iron Ores.

Simões, J. J. Gonçalves, Minas Geraes.
Various Pyrites and Ores from the Gambá Mine.

Sá., Col. Domiciano F. de, Minas Geraes.
Gold Ores.

Silva, Major A. T. da, Minas Geraes.
Chromic Iron and Serpentine.

Schumann, Carlos, Paraná.
Marble.

Silva, Dr. José Gonçalves da, Bahia.
Copper Ores.

Souza, Samuel de, Rio Grande do Sul.
Gold Quartz and Native Metallic Gold.

Silva, F. José da, Matto Grosso.
White Limestone.

Santa Luci, Martin, Matto Grosso.
Calcareous Rock.

Santo Antonio, Intend. de, Rio Grande do Sul.
Sandstone, Eruptive Rocks (Melaphyr, Trapp and Other Varieties).

Silves, Intend. de, Amazonas.
Gypsum.

Schimmelpfeng, Viuva, Paraná.
Kaolin.

Serro Azul, Com. Municipal de, Paraná.
Rose Marble.

Silva, Francisco Xavier da, Paraná.
Eraterite and Red Granite, Streaked.

S. José dos Pinhaes, Com. M. de, Paraná.
Iron Ore.

S. J. de Montenegro, Intend. de, Rio Grande do Sul.
Grés, Melaphyr for Construction.

Souza, Dr. A. M. Peixoto de, Rio de Janeiro.
Graphite.
There is a large deposit at S. Fidelis.

Sampaio, Dr. M. F. de Almeida, Bahia.
Manganese Ore.

The Vista Alegre Gold Mining Co., Rio Grande do Sul.
GOLD ORES.

The Trans-Pacific Co., Matto Grosso.
GOLD AND GOLD SANDS.
DIAMONDS AND GRAVEL.

This is one of the companies which exploit the deposits of the Coxipó and other rivers by means of dredges. The yield averages 25 grains to a cubic yard of sand, in which valuable diamonds are also found.

Thereza Christina, E. F. D., Sta. Catharina.
COAL.

Important coal deposits have been found and are being worked along the line of this railroad in the State.

Tibagy, Com. Municipal, Paraná.
SALTPETRE.
GLAUBERS SALT.

Unzer, Totila, Minas Geraes.
POLISHING STONE AND CRYSTAL.

União, Banco, Paraná.
MARBLE.

União, Banco, S. Paulo.
MARBLE.

This bank owns some of the best marble quarries in the States of S. Paulo and Paraná.

Ulsen Junior, André, S. Paulo.
OCHRES.

Uruguayana, Intend. de, Rio Grande do Sul.
OXIDE OF COPPER AND METALLIC COPPER.

Large deposits exist near the city of Rio Grande do Sul on the Quarahy River.

Vieira, Raul, Minas Geraes.
ALUMINUM ORE, HYDRARGILITE.
TOPAZ, RUTILE, TURMALINES FROM H. HARGREAVE'S MINES.

Vasconcellos, Padre M. M. Pereira de, Minas Geraes.
VARIOUS ORES.

Vieira Filho, H. José, Matto Grosso.
CHALCOPYRITE, MALACHITE (COPPER ORE).
GALENA (LEAD ORE) FROM THE JAURÚ RIVER VALLEY.

Vargas, Col., Rio Grande do Sul.
MARBLE.

Vecchio, Angelo, Paraná.
IRON ORES.

Vasconcellos, Manoel A., Maranhão.
LIMESTONE AND LIME.

Virginio, Manoel E., Matto Grosso.
OLIGISTIC IRON ORE.

Wigg, Usina, Minas Geraes.
MANGANESE ORES FROM THE MIGUEL BURNIER MINES.

Ypanema, F. de Ferro, S. Paulo
IRON OXIDES AND CLAY.

GROUP 117.

Mine Models, Maps, Photographs.

Rotulo, Ltd., Minas Geraes.
PHOTOGRAPHS.

St. John del Rey Gold Mining Co., Minas Geraes.
PHOTOGRAPHS AND MAPS.

The Trans-Pacific Co., Matto Grosso.
PHOTOGRAPHS OF DREDGE.

Wigg, Usina, Minas Geraes.
MAP OF MANGANESE MINES.

GROUP 118.

Metallurgy.

Bretas, Affonso, Minas Geraes.
MANUFACTURED IRON.

Becker & Irmão, José, Rio Grande do Sul.
PHOTOGRAPHS OF SHOPS.

Esperança, Usina, Minas Geraes.
MANUFACTURED IRON.

Miller & Filho, Minas Geraes.
IRON.

Mines de Cuivre de Camaquam, Soc., Rio Grande do Sul.
COPPER.

Ypanema, F. de Ferro, S. Paulo.
SAMPLES OF IRON.

GROUP 119.

Literature of Mining, Metallurgy, Etc.

Dahne, Eugenio, Rio Grande do Sul.
GEOLOGIC MAP OF RIO GRANDE.

Ferraz, Luiz, Minas Geraes.
REPORT ON AURIFEROUS DEPOSITS OF PALMA.

Governo do Estado, Rio Grande do Sul.
MAPS.

Medrado, Alcides, Minas Geraes.
BRAZILIAN MINING REVIEW.

Ouro Preto, Escola de Minas de, Minas Geraes.
ANNUAL PROCEEDINGS OF THIS MINING SCHOOL.

Interior View Brazilian Section Forestry, Fish and Game.

DEPARTMENT OF FISH AND GAME

GROUPS 120 to 124

BRAZIL'S area of over 3,218,130 square miles, peopled only by 20 million inhabitants, is still covered by dense and vast forests where game of all kinds is abundant and will be for many years to come.

An enormous variety of four-footed game of all sizes known to exist in tropical countries, with very few exceptions, is found in every part of the country. Tapirs, wolves, capivaras, foxes, wild boars, pacas, deer, lontras, tamanduás, etc., are plentiful and their skins valuable.

Alligators, land and water tortoises and other amphibious animals, are found in all the large rivers and lakes.

The ornithology of Brazil includes the most varied and beautiful birds, whose magnificent appearance and colors can be seen and admired both in this Department and in that of the Varied Industries.

As there is very little exportation of skins, furs and feathers from Brazil to other countries, hunting is done for sport only, or in some places for the protection of cattle. For this reason Brazil's exhibit is very small in this Department and only a few skins, birds and birds' eggs are shown. Among the exhibits the most prominent ones are those belonging to Messrs. A. Jacobsen and Carlos Ritter, who show beautiful specimens of taxidermy and a fine collection of birds.

Unfortunately, on account of lack of time for preparation, and owing to the spoiling of a few specimens on the voyage, in the Fish Department the exhibits consist simply of a few models of fishing tackle, nets, traps, canoes, etc., and some samples of whale and other oils.

In the waters of the Atlantic, that wash the long coast-line of Brazil, is found the largest variety of salt water fish, mollusks, etc. In the Bay of Rio de Janeiro alone, 94 varieties of well known and classified fishes are sold in the public markets. The rivers and lakes of Brazil abound in fish.

The best exhibits of this section are those of the State Government of Amazonas, of the Inspectoria de Caça e Pesca of Rio de Janeiro, and that of Captain H. Boiteux of Paraná.

GROUP 121.

Products of Hunting.

Agricultura, Secretaria da, Bahia.
STUFFED ANIMALS AND BIRDS.
ARMADILLO SHELLS.

Almeida Filho, Dr. João B. de, Matto Grosso.
SKINS OF 4 VARIETIES OF MONKEYS AND 1 OF JAGUATIRICA (FELIS MITUS).

Arruda, João P. de, Matto Grosso.
SKIN OF LONTRA (LUTRA).

Argollo, Cardoso & Co., Bahia.
HERON AND OSTRICH FEATHERS.

Barros, A. P. Alves de, Matto Grosso.
SKIN OF ONÇA (FELIS).

Bastos, Celestino A, Matto Grosso.
SKIN OF YOUNG TAPIR.

Bouret Annibal, Matto Grosso.
SKIN OF JAGUATIRICA AND ONÇA (JAGUAR).

Barcellos, Intendencia de, Amazonas.
SKINS OF WILD ANIMALS.

Carvalho, Dr. A. A. Figueiredo, Parahyba.
STUFFED ALLIGATOR, FEATHERS AND SNAKE-RATTLES.

Commissão do Estado, Goyaz.
OSTRICH EGGS.

Commissão do Estado, Piauhy.
SKINS OF WILD ANIMALS.
OSTRICH OIL.

Commissão do Estado, Amazonas.
COLLECTION OF BIRDS AND EGGS.

Commissão do Estado, Matto Grosso.
SKINS OF 2 VARIETIES OF ONÇA (FELIS).
1 OF TAMANDUÁ BANDEIRA (MYRMECOPHAGO).
1 OF WOLF (CANUS JUBATUS), 1 OF AGOUTI.

Del Claro, Samuel, Paraná.
SKIN.

Dom Pedrito, Com. de, Rio Grande do Sul.
OSTRICH FEATHERS.

Feira de Sant' Anna, C. M. de, Bahia.
SKINS OF WILD ANIMALS.

Jacobsen, Alberto, Rio de Janeiro.
STUFFED ANIMALS, SKINS AND SHELLS.

Jacobsen, Alfredo, Rio de Janeiro.
ALLIGATORS, SNAKES, LIZARDS AND INSECTS.

Jacobsen, Madame Alice, Rio de Janeiro.
FEATHERS, BIRDS AND NESTS.

The taxidermist work done by these three last exhibitors is very fine, and in their collection is shown a large number of birds and insects.

Krone, Ricardo, S. Paulo.
COLLECTION OF EGGS AND NESTS.

Mossoró, Intendencia de, Rio Grande do Norte.
SKINS OF WILD ANIMALS.

Macedo, D. Elisa de, Rio de Janeiro.
STUFFED ANIMALS AND SNAKE SKINS.

Mattos, Joaquim F. de, Matto Grosso.
HERON WINGS.

Oscar & Carvalho, Paraná.
2 SKINS OF ARIRANHA (LUTRA), 2 OF JAGUATIRICA (FELIS), 1 OF GRAXAHIM, 1 OF COATI.

Palmas, Com. de, Paraná.
SKIN OF TAPIR.

Patrulha, Com. de, Rio Grande do Sul.
2 SKINS OF MONKEYS, 3 OF JAGUATIRICA (FELIS), 3 OF ONÇA (FELIS), 1 OF YOUNG TAPIR, 1 OF LONTRA (LUTRA).

Ritter, Carlos, Rio Grande do Sul.
BEAUTIFUL COLLECTION OF BIRDS OF THE STATE OF RIO GRANDE DO SUL.

Schneider, Frederico, Matto Grosso.
SKIN OF ALLIGATOR.

Senna, Nelson de, Minas Geraes.
1 SKIN OF CANGUSSÚ (JAGUAR).
4 SKINS OF SUSSUARANA (JAGUAR).
1 SKIN OF LONTRA (LUTRA).

Sociedade Paulista de Agricultura, Commercio e Industria, S. Paulo.
EGGS AND NESTS OF BIRDS.

Vieira Filho, H. José, Matto Grosso.
SKIN OF LONTRA (LUTRA).

GROUP 122.

Fishing Epuipment and Products.

Boiteux, Henrique, Paraná.
COLLECTION OF NETS AND FISHING TACKLE.

Used on the coast of Paraná for fish, shrimps, mollusks, etc.

Crespo, Constantino G., Matto Grosso.
MODEL OF FISHING BOAT USED ON THE RIVERS OF THE STATE.

Governo do Estado, Amazonas.
FISHING CANOES, NETS, TRAPS, LINES, HARPOONS, CORDS, MATERIALS FOR NETS, TRAPS, FLOATS, CLUBS, BASKETS, ETC.

This is a very complete and interesting collection of fishing appliances used on the rivers and lakes of the State.

Jacobsen, Alberto, Rio de Janeiro.
STUFFED FISH, MODELS OF FISHING CATAMARANS.

Pekorski, Anastacio, Paraná.
CORDS FOR FISHING PURPOSES.

Pesca e Caça, I. G. de Mattas, Rio de Janeiro.
COLLECTION OF FISHING NETS AND TRAPS USED IN THE BAY OF RIO DE JANEIRO.

Album and book descriptive of fishing appliances and varieties of fish found in the Bay of Rio de Janeiro.

GROUP 123.

Products of Fisheries.

Agricultura, Secretaria da, Bahia.
WHALE OIL.

Governo do Estado, Amazonas.
PIRARUCÚ SHELLS AND TONGUES.
DRIED FISH (PIRARUCÚ FLOUR).
FISH AND TURTLE OIL.

Novaes, João, Amazonas.
PIRARUCÚ FLOUR (DRIED FISH).

S. Salvador, C. Municipal de, Bahia.
WHALE OIL.

DEPARTMENT OF ANTHROPOLOGY

GROUPS 125 to 128

THE anthropological collections exhibited are not very large, but are, however, exceedingly interesting and of great value to those interested in this branch of study.

In Brazil there are, belonging to Federal and State Governments and to some private parties and museums, valuable collections too precious to run the risk of a long voyage and which would require very careful handling and packing. Among the collections exhibited there are three that contribute greatly to the knowledge of the earlier races that inhabited that part of South America previous to its discovery.

The State Government of Amazonas has a splendid collection of articles from the tribes which formerly inhabited the banks of the Uaupés River and its affluents; many of these tribes have already disappeared and the remaining few are now living in reservations under the care of the Government.

In this collection are shown arms for ceremonies, war, hunting and fishing, cooking utensils, household goods, musical instruments, dresses commonly used for festival and funeral ceremonies, funeral urns and shields, ceramic articles, tobacco, rosins, curaré poison, implements in stone, wood and bones, shields in leather, etc., hammocks, baskets, fibre tissues, fish-traps, ropes, canoes, and some photographs showing types of Indians of various tribes, their habitations and villages, etc.

Another important collection is the one belonging to Mr. Miranda Ribeiro, which consists of a large number of articles from Indian tribes living in the interior of the States of Amazonas, Pará, Goyaz and Paraná and from some extinct tribes also.

Mr. Ribeiro's collection, among other relics, contains arms, dresses, ornaments, implements, musical instruments, articles in stone and clay, etc.

Mr. Ricardo Krone exhibits a fine collection of relics from the State of S. Paulo, and some photographs. This collection is very

MR. J. C. ALVES DE LIMA,
Commissioner in charge of Departm
of Anthropology.

interesting and consists of articles having belonged to extinct tribes which inhabited the coast of the State of S. Paulo and lived on fish and mollusks. With these bones and shells, mixed with earth, they formed small elevations, some about 60 feet high, known as "Sambaquis."

The study of the Paleo-ethnology or Prehistoric Archeology in Brazil, during the last century, occupied the attention of many foreign and Brazilian anthropologists who, after long, patient, as well as painstaking investigations, have collected positive and valuable facts in order to obtain a correct knowledge of the origin, language, customs, etc., of the original inhabitants of South America.

Among others, the following men have written interesting memoirs and books on this subject: Dr. Pieter Lund (who, during 30 years, studied over 800 caves in the State of Minas Geraes alone, made a great number of important discoveries), Messrs. Paul Ehrenreigh, Prince de Wied-Neuwied, Blumenback, A. d'Orbigny, Hart, Von den Stein, Lucian Adam, Exhewege, H. von Ihering, Ch. Rath, Ambrosetti, T. Araripe, Telemaco Borba, Claro Monteiro, Sá e Oliveira, Ferreira Penna, Rodrigues Ferreira, Von Koseritz, Theodoro de Sampaio, Couto de Magalhães, J. B. de Lacerda, Taunay, Borges dos Reis, and many others.

GROUP 125.

Literature.

Caldas, J. Augusto, Matto Grosso.
PAMPHLET DESCRIBING THE BORORÓS COROADOS TRIBE, THEIR CUSTOMS AND MANNER OF LIVING, ETC.

Ihering, Dr. H. von, S. Paulo.
BOOKS ON THE ANTHROPOLOGY OF THE STATE OF S. PAULO.

Dr. von Ihering has spent many years in the study of Anthropology and Ethnology in different parts of Brazil and has been one of the most distinguished and painstaking students, among those who have devoted themselves to this class of work. A great deal of what is known about the Indians of Brazil is due to his successful work.

Reis, Borges dos, Bahia.
BOOK ON THE INDIANS OF THE STATE OF BAHIA.

Mr. Borges dos Reis, who for many years has been making a thorough study of the Indians of the State of Bahia, has written a very interesting book on this subject.

GROUP 127.

Ethnology.

Azambuja, Antonio A., Matto Grosso.
INDIAN ORNAMENTS OF THE "CAJABIS" TRIBE.

Almeida Filho, Dr. J. B. de, Matto Grosso.
INDIAN HAMMOCK AND CRANIUMS OF THE "BACHAIRIS" TRIBE.

Badariotti, Padre Nicolao, Minas Geraes.
INDIAN ARTICLES MADE OF STONE.

Bodstein, Jorge, Matto Grosso.
INDIAN WAR ARMS OF THE "CARAJÁS" TRIBE.

Balzala, Padre, Matto Grosso.
INDIAN ARTICLES.

Padre Balzala is the director of the Indian Colony or Reservation of the "Bororós Coroados" Indians. This colony is maintained by Catholic Missionaries, has 150 Indians, belonging to 24 families and was founded in August, 1903. The Indians receive elementary instruction, learn a trade and occupy themselves with agricultural work.

Barros, A. P. Alves de, Matto Grosso.
COLLECTION OF BOWS, ARROWS AND ORNAMENTS.

Bastos, Joaquim J. da Cunha, Goyaz.
INDIAN COLLAR.

Commissão do Estado, Matto Grosso.
ARMS OF THE "MAMBARÉS" TRIBE.
ORNAMENTS OF THE "PARECIS" AND "BARBADOS" TRIBES.

Camargo, A. D. Pompeo de, Matto Grosso.
ARMS AND ORNAMENTS.

Carneiro, J. Netto C., Goyaz.
VEGETABLE FIBRES AND TOBACCO AS PREPARED AND USED BY THE INDIANS.

Costa, F. Martins, Goyaz.
PALM FIBRES USED BY INDIANS FOR HAMMOCKS, DRESSES, ETC.

Jorge, Dr. Estellita, **Amazonas.**
INDIAN ARROWS.

Krone, Ricardo, **S. Paulo.**
PHOTOGRAPHS, COLLECTION OF SHELLS AND RELICS FROM THE "SAMBAQUÍS" OF THE STATE OF S. PAULO.

The following articles form a very interesting collection:

Malan, Padre A., **Matto Grosso.**
COLLECTION OF ARTICLES OF THE "CARAJÁS" TRIBE.

Novis, Dr. Augusto, **Matto Grosso.**
DRINKING CUP USED BY THE INDIANS.

Perillo, J., **Goyaz.**
VEGETABLE FIBRES USED BY THE INDIANS.

Roche, Alphonse, **Matto Grosso.**
ARMS, MUSICAL INSTRUMENT, DRESS, ETC.

Ribeiro, Dr. Miranda, **Rio de Janeiro.**
COLLECTION OF ARMS, DRESSES, ORNAMENTS, IMPLEMENTS, STONEWARE, ETC., USED BY INDIANS OF THE STATES OF AMAZONAS, PARÁ, GOYAZ AND PARANÁ.

The following collection is large and very carefully selected:

State Government, **Amazonas.**
COLLECTION OF INDIAN ARTICLES OF THE TRIBES OF THE UAUPÉS RIVER AND ITS TRIBUTARIES.

This collection contains 189 different varieties of articles in ceramics, household goods, ornaments, furniture, arms for sport and war, hunting and fishing, fishing traps, hammocks, shields, tools, funeral urns, canoe, wooden vessels for the fermentation of beverages, poison, rosins, tobacco, fibres, stone articles, musical instruments, fishing nets, utensils, and some photographs showing the manner of living and type of some of the Indians of the State.

Zédes, Moysés Lopes, **Goyaz.**
INDIAN HEAD ORNAMENT AND CANE.

DEPARTMENT OF SOCIAL ECONOMY

GROUPS 129 to 141

BRAZIL is comparatively a new country, and its growth and development, especially of late years, after the change in the form of Government, have been steady and fairly rapid.

In its social and economic conditions, the country has been more or less guided by the results and experience obtained in the countries of Europe and the United States, naturally modified according to the circumstances and adapted to the conditions peculiar to the country, people, climate, etc.

The study and investigation of social and economic conditions are being undertaken constantly and the Government is well equipped with bureaus, offices and officers; a large number of private bureaus, museums, boards of trade, reform associations, etc., are in existence, instruction in economic and social economy is given in all of the higher schools of the country and a few regular and many occasional publications are made on these subjects.

The physical resources and characteristics of the country and of each state, the development of the means of transportation, by land, river or sea, the location and organization of industrial enterprises are being studied constantly, protected and fostered by the respective Governments especially the Agricultural and Mining Industries. Unfortunately coal has not yet been mined in sufficient quantities to make Brazil a great manufacturing centre of the world, although she possesses now all the other requirements, such as the best iron and manganese ores in the world, magnificent and abundant woods of which nearly 2,000 varities can be used for all purposes, splendid water-power distributed all over the country, etc., etc.

The regulation of industries, and labor pertaining to factories, railways, mines, navigation, etc., is practically well organized.

Brazil has no need of labor organizations and there are practically no labor disturbances or disputes. The methods of industrial remuneration vary a great deal according to the kind of work. Wages are usually paid weekly, fortnightly, monthly or by the piece. In many cases, however, premiums are given, profit sharing being considered, as well as co-operation or co-partnership.

The co-operative societies are very few in number, consisting mostly of credit and banking institutions and agricultural organizations. There are banking and insurance institutions of all kinds in large numbers, which are well organized and paying concerns.

The working-classes are as a rule well-housed, the houses being built generally by private parties or industrial associations, under direct inspection of Municipal Authorities. Rents and living are always reasonable. The Liquor Question does not exist in Brazil, as there is very little excess in, or abuse of liquor in the country.

Movements for the general betterment of conditions are being constantly agitated in Brazil; there is a very large number of provident, charitable, beneficent, humane, social, educational, religious and hospital societies, which take care of the poor and sick, orphans, destitute children and adults, etc.

The neglected, delinquent and destitute children are especially cared for by the State Governments and Municipalities and private institutions. The care of destitute adults, the care and relief of needy families, etc., are attended to by private associations.

There are also many hospitals, dispensaries and asylums belonging to the Government and to private parties for the care of the sick, insane, feeble-minded, foundlings, etc.

Much attention is paid to public hygiene in all the states. Investigations are being made constantly and splendid results have been obtained from the methods employed for the prevention of infectious diseases. Private, industrial and public sanitation is being improved constantly.

Municipal improvement is being continually made in all the large cities and in some of the smaller ones, which are provided with fire and police protection, water-supply, sewerage, street-

lighting, parks, etc., besides pavements, transportation, street cleaning, etc., done by the Municipalities or by contracts.

Brazil's exhibit in this department of the Exposition is very small, and not at all adequate to give any idea of the actual social and economic conditions of the country.

However, the publications, statistics, reports and photographs exhibited will show the degree of advancement reached in some parts of the country with relation to these particular subjects.

GROUP 129.

Study and Investigation of Social and Economic Conditions.

Associação Commercial de Manaos, **Amazonas.**
Commercial Statistics.

Associação Commercial de Santos, **S. Paulo.**
Statistical Maps Showing the Coffee Crop for the Year 1901-1902.
Each state has its own commercial association which investigates the commercial conditions and relations of the state and looks after the interests of the commercial classes.

Agricultura, Secretaria da, **Rio de Janeiro.**
Statistics of General Imports and Exports, Shipping, Exchange, Coffee, Etc., for the Year 1901-1902.

Agricultura, Secretaria da, **Bahia.**
Legislation, Reports and Photographs.

Agricultura, Secretaria da, **S. Paulo.**
Book on Statistics and General Information.
This book illustrates the splendid conditions and resources of the State of S. Paulo.

Bandeira Junior, Antonio F., **S. Paulo.**
Work on "Industry in the State of S. Paulo."

Fridanza, Cav. F. A., **Amazonas.**
Descriptive and Illustrated Book on the State of Amazonas.
This beautifully illustrated book describes not only the social and economic conditions, but also the geography, history, physical resources, etc., of the State.

Governo do Estado, **Bahia.**
Reports, Messages to Congress, Etc.

Governo do Estado, **Matto Grosso.**
Brief Notice of Resources of the State.

Governo do Estado, **Amazonas.**
Publications, Reports, Etc.

Governo do Estado, **Minas Geraes.**
Photographs and Publications on Resources of State.
Legislation about Land and Immigration, Etc.

Governo do Estado **Rio de Janeiro.**
Publication Describing Economic Conditions and Resources of the State.

Interior, Secretaria do, **S. Paulo.**
Photographs.

Imprensa Official, **Minas Geraes.**
Publications, Reports, Etc.

Lindgren, Carlos J., **Rio de Janeiro.**
Statistical Maps on Commerce, Etc.

Medeiros & Co., **S. Paulo.**
Commercial Year-Book.

Prefeitura Municipal, **Rio de Janeiro.**
Description of Some Industrial Establishments.

Porto-Alegre, Intendencia de, **Rio Grande do Sul.**
Descriptive Account of the City, its Resources, Laws, Industries, Etc.

Ramos, Dr. Ferreira, **S. Paulo.**
"Industries and Electricity in the State of S. Paulo."
This book gives a description of the water power of the State, its utilization, illustrating the location, horsepower, etc., of the principal water falls, also a very interesting description of the handling and preparation of coffee for the market. A short description of nearly all the industries, including mining, is found also in this book.

Santos, Dr. J. Americo dos, **Rio de Janeiro.**
Work on "Droughts in Northern Brazil."

Sant' Anna Nery, B. de, **Amazonas.**
Work on the State of Amazonas.

Sociedade Paulista de Agric., Commercio e Industria, **S. Paulo.**
Photographs.

Terceiro Districto Agronomico, S. Paulo.
PUBLICATION DESCRIBING CONDITIONS AND RESOURCES OF THE DISTRICT.

GROUP 130.

Economic Resources and Organization.

Danneman & Co., Bahia.
PHOTOGRAPHS OF TOBACCO FACTORY, ETC.

Emporio Industrial do Norte, Bahia.
PHOTOGRAPHS OF SHOPS, STORES, ETC.

Echenique Irmãos & Co., Rio Grande do Sul.
WORK ON "STATE OF RIO GRANDE DO SUL."

Governo do Estado, Rio Grande do Sul.
ALBUM SHOWING SOME OF THE STATE COLONIES.

Johnston & Co., E., S. Paulo.
PHOTOGRAPHS OF COFFEE STORES AND THE HANDLING OF COFFEE.

GROUP 139.

Charities and Correction.

Casa de Correcção, Rio Grande do Sul.
PHOTOGRAPHS OF PENITENTIARY.

Hospicio de Alienados, Rio de Janeiro.
PHOTOGRAPHS SHOWING BUILDINGS AND COLONIES OF INSANE ASYLUM.

Moncorvo Filho, Dr., Rio de Janeiro.
WORK ON "PROTECTION OF DESTITUTE CHILDREN."

Penitenciaria, Bahia.
PHOTOGRAPHS.

Silva, Dr. Ferreira da, Rio de Janeiro.
REPORT OF "POLYCLINIC OF NICTHEROY."
This is an institution for the care of sick destitute adults.

GROUP 140.

Public Health.

Desinfectorio Central da Capital, S. Paulo.
PHOTOGRAPHS OF DISINFECTING PLANT, APPARATUS, ETC.

Desinfectorio Central de Campinas, S. Paulo.
PHOTOGRAPHS OF DISINFECTING PLANT, APPARATUS, ETC.

Hospital de Isolamento da Capital, S. Paulo.
PHOTOGRAPHS OF BUILDINGS, ETC.

Hospital de Isolamento de Campinas, S. Paulo.
PHOTOGRAPHS OF BUILDINGS, ETC.

Hygiene, Inspectoria de, Bahia.
PUBLICATIONS, STATISTICS, ETC.

Instituto Serumtherapico de Butantan, S. Paulo.
PHOTOGRAPHS SHOWING BUILDINGS, STABLES, LABORATORIES, ETC., WHERE DIFFERENT KINDS OF SERUM ARE PREPARED.

Instituto Vaccinogenico, S. Paulo.
PHOTOGRAPHS OF BUILDINGS, ETC., FOR THE PREPARATION OF VACCINE.

Laboratorio Pharmaceutico do Estado, S. Paulo.
PHOTOGRAPHS OF BUILDING, ROOMS, ETC.

Laboratorio de Bromatologia, S. Paulo.
PHOTOGRAPHS OF BUILDINGS, ETC., FOR THE ANALYSIS OF VARIOUS PRODUCTS.

GROUP 141.

Municipal Improvement.

Bello Horizonte, Pref. de, Minas Geraes.
PHOTOGRAPHS OF MUNICIPAL IMPROVEMENTS.

Corpo de Bombeiros, Rio de Janeiro.
PHOTOGRAPHS.
(See Department of Transportation.)

Corpo de Bombeiros, S. Paulo.
PHOTOGRAPHS.
This is one of the best equipped fire departments in Brazil.

Intendencia Municipal, Bahia.
LEGISLATION, REGULATIONS AND STATISTICS.

Policia, Chefia de, S. Paulo.
PHOTOGRAPHS.

MR. E. DA ROCHA DIAS,
Aid of Commission.

DEPARTMENT OF

PHYSICAL CULTURE

GROUPS 142 and 143

PHYSICAL CULTURE in Brazil begins with the elementary education given to the children in the primary schools. Nearly every school is equipped with implements, has fields, gymnasiums, etc., necessary for the physical training of the child. Games and exercises are practiced both during class and recreation hours. Athletic sports and games are of a milder nature than in the United States. Bicycling, tennis, cricket, fencing, foot races, boat races, swimming, rowing and some others constitute the principal sports.

There are a nunber of amateur athletic associations, and championship contests are regular events every year in different parts of the country. One state only is represented here in St. Louis.

GROUP 143.

Games for Children and Adults of the Various Athletic Organizations.

Atiradores, Club de, Rio Grande do Sul.
PHOTOGRAPHS.

Blitz, Radfahrer Verein, Rio Grande do Sul.
PHOTOGRAPHS.

Foot ball Porto Alegrense, Gremio, Rio Grande do Sul.
PHOTOGRAPHS.

Porto Alegre, Fuss Bal, Rio Grande do Sul.
PHOTOGRAPHS.

Regatas de Porto Alegre, Club de, Rio Grande do Sul.
PHOTOGRAPHS.

Ruvira, Ramão, Rio Grande do Sul.
PHOTOGRAPH OF CLASS.

Rudder Verein Germania, Rio Grande do Sul.
PHOTOGRAPHS.

Theoria e Pratica, Club, Rio Grande do Sul.
PHOTOGRAPHS.

União Velocipedica, Rio Grande do Sul.
PUBLICATIONS, PHOTOGRAPHS AND UNIFORMS.
RELIEF MAP OF GROUNDS AND TRACK.

MEMBERS OF JURY OF AWARDS.

SUPERIOR JURY

COLONEL F. M. DE SOUZA AGUIAR.
J. C. ALVES DE LIMA.

DEPARTMENT JURY

J. B. DA MOTTA, - - - - -	Education
DR. A. DA GRAÇA COUTO, - - -	Liberal Arts
E. DAHNE, - - - - -	Manufactures
ALTINO CORREA, - - - - -	Transportation
F. FERREIRA RAMOS, - - -	Agriculture
W. COMPTON REED, *Secretary*, - - -	Fish and Game
J. C. ALVES DE LIMA, *Vice-Chairman*, -	Anthropology

GROUP JURY

	Group
J. B. DA MOTTA, *Vice-Chairman*, - -	2, Education
J. AMERICO DOS SANTOS, - - -	9, Fine Arts
DR. A. DA GRAÇA COUTO, *Vice-Chairman*, -	15, Liberal Arts
A. JACOBSEN, - - - - -	23, Liberal Arts
J. C. DE CARVALHO, - - - -	38, Manufactures
MRS. A. JACOBSEN, - - - -	54, Manufactures
E. DAHNE, *Vice-Chairman*, - - -	60, Manufactures
MISS NELLIE SAXTON, - - - -	61, Manufactures
A. J. DA COSTA COUTO, - - -	70, Electricity
ALTINO CORREA, *Vice-Chairman*, - -	73, Transportation
OSCAR THOMPSON, *Secretary*, - - -	81, Agriculture
RICHARD MARDOCK, - - - -	84, Agriculture
F. FERREIRA RAMOS, *Vice-Chairman*, -	88, Agriculture
E. DA ROCHA DIAS, - - - - -	90, Agriculture
J. R. GOMES, - - - - - -	92, Agriculture
J. CORDEIRO DA GRAÇA, - - - -	113, Forestry
A. C. LOPES GONÇALVES, *Secretary*, - -	114, Forestry
A. OLYNTHO, *Vice-Chairman (Honorary)*, -	116, Mines and Metallurgy
W. COMPTON REED, *Vice-Chairman*, - -	121, Fish and Game
J. C. ALVES DE LIMA, *Vice-Chairman*, - -	127, Anthropology

VIEWS OF RIO DE JANEIRO.

1—Praça da Republica. 2—Friburg Park. 3—Fifteenth of November Square.
4—Sugar Loaf, seen from Imbuhy. 5—Militair College.

AWARDS OBTAINED BY BRAZIL AT THE LOUISIANA PURCHASE EXPOSITION:

DEPARTMENTS	Education				Art				Liberal Arts				Manufactures			
STATES	Grand Prize	Gold Medal	Silver Medal	Bronze Medal	Grand Prize	Gold Medal	Silver Medal	Bronze Medal	Grand Prize	Gold Medal	Silver Medal	Bronze Medal	Grand Prize	Gold Medal	Silver Medal	Bronze Medal
S. Paulo	2	3	3	1			1	1	1	12	22	16	2	12	10	10
Rio Grande do Sul				1			1			8	14	34	3	16	15	25
Minas Geraes				3				1		4	3	5		2	3	4
Capital Federal	2	10	1	2		2	1	4	9	24	13	9	5	5	6	4
Amazonas	1		1							3	4	14			4	3
Paraná												4		6	3	4
Bahia		2	3	3						1	4	3		1	3	4
S. Catharina											2	1			1	11
Pernambuco										2	4	1		4		2
Matto Grosso			1	2										2	3	2
Maranhão											3	5	1	2	1	7
Rio de Janeiro																
Pará		2										4		1	2	
Parahyba												1		1		2
Piauhy																1
Sergipe															1	
Goyaz															1	
Alagoas																
Espirito Santo																
Rio Grande do Norte																1
Ceará															1	
TOTAL	5	17	9	12		2	3	6	10	54	69	97	11	52	54	80
GRAND TOTAL	43				11				230				197			

DEPARTMENTS	Machinery				Electricity				Transportation				Agriculture				Forestry			
STATES	Grand Prize	Gold Medal	Silver Medal	Bronze Medal	Grand Prize	Gold Medal	Silver Medal	Bronze Medal	Grand Prize	Gold Medal	Silver Medal	Bronze Medal	Grand Prize	Gold Medal	Silver Medal	Bronze Medal	Grand Prize	Gold Medal	Silver Medal	Bronze Medal
S. Paulo						3				1			13	66	59	61		2	7	4
Rio Grande do Sul			1							2	3	7	2	19	62	35		1	6	5
Minas Geraes						1							1	17	33	31		1	2	2
Capital Federal					1	1			1	5	2	1	5	16	12	6	1	1		
Amazonas						2				1		1		12	11	7	1	9	36	8
Paraná													1	13	25	29		1	15	1
Bahia										1			2	11	13	6		1	10	5
S. Catharina														3	11	11		1	11	1
Pernambuco										1		1	1	9	11	3				
Matto Grosso										1			1	1	3	3		1	2	6
Maranhão														1	9	4				1
Rio de Janeiro													1	3	12	14				
Pará														3	2			1	3	
Parahyba															2				1	4
Piauhy														1					8	
Sergipe															2	1		1	1	
Goyaz															2	1				
Alagoas														1	1	2				1
Espirito Santo															1	1			1	
Rio Grande do Norte																				
Ceará																				1
TOTAL			1		1	7			1	12	5	10	27	176	271	215	2	20	103	39
GRAND TOTAL	1				8				28				689				164			

DEPARTMENTS	Mines and Metallurgy				Fish and Game				Anthropology				Social Economy				Physical Culture				TOTAL				GRAND TOTAL
STATES	Grand Prize	Gold Medal	Silver Medal	Bronze Medal	Grand Prize	Gold Medal	Silver Medal	Bronze Medal	Grand Prize	Gold Medal	Silver Medal	Bronze Medal	Grand Prize	Gold Medal	Silver Medal	Bronze Medal	Grand Prize	Gold Medal	Silver Medal	Bronze Medal	Grand Prize	Gold Medal	Silver Medal	Bronze Medal	
S. Paulo		2	2	1							1		1	5	3						19	106	108	94	327
Rio Grande do Sul		5	20	9			1								1	1		1			5	52	124	117	298
Minas Geraes	1	15	17	16								1				1					2	40	58	64	164
Capital Federal	1	4	3			2				1	1		1	1							26	72	39	26	163
Amazonas							1		1												3	27	57	33	120
Paraná			2	4																	1	20	45	42	108
Bahia		2	3	3												1					2	19	36	25	82
S. Catharina																						4	25	24	53
Pernambuco																					1	16	15	7	39
Matto Grosso		1	2	3								1			1						1	6	12	17	36
Maranhão																					1	3	13	17	34
Rio de Janeiro			1	1																	1	3	13	15	32
Pará																						7	7	4	18
Parahyba				2																		1	3	9	13
Piauhy				1																		1	8	2	11
Sergipe				1																		1	4	[illegible]	7
Goyaz			1																				4	1	5
Alagoas																						1	1	3	5
Espirito Santo																							2	1	3
Rio Grande do Norte			1																				1	1	2
Ceará																							1	1	2
TOTAL	2	29	52	41		2	2		1	1	2	2	2	6	5	3		1			62	379	576	505	1522
GRAND TOTAL	124				4				6				16				1				1522				

ST. LOUIS, MO., NOVEMBER, 1904.

DEPARTMENT OF EDUCATION

GROUP 1.
Elementary Education.

GRAND PRIZE.
Governo do Brazil, Rio de Janeiro.

GOLD MEDAL.
Prefeitura do Districto Federal, Rio de Janeiro.
Secretaria do Interior, S. Paulo.
Associação Promotora da Instrucção, Rio de Janeiro.

SILVER MEDAL.
Governo do Estado da Bahia, Bahia.
Secretaria do Interior, Bahia.
Orphanato do Santissimo Coração de Jesus, Bahia.
Governo do Estado, Matto Grosso.

BRONZE MEDAL.
Lyceo Salesiano de Cuyabá, Matto Grosso.
Escola da Companhia Luz Estearica, Rio de Janeiro.
Casa de São José, Rio de Janeiro.
Padre Balzala, Matto Grosso.
Collegio S. Luiz, Minas Geraes.

GROUP 2.
Secondary Education.

GOLD MEDAL.
Escola Normal, Rio de Janeiro.
Escola Normal, S. Paulo.

BRONZE MEDAL.
Escola Dom Bosco, Minas Geraes.

GROUP 3.
Higher Education.

GOLD MEDAL.
Escola Polytechnica, São Paulo.
Escola de Medicina, Bahia.
Escola de Medicina, Rio de Janeiro.

SILVER MEDAL.
Escola de Pharmacia, São Paulo.

GROUP 6.
Special Education in Commerce and Industry.

GRAND PRIZE.
(a) Irmandade da Santa Casa de Misericordia, Rio de Janeiro.
Lyceo do Sagrado Coração, São Paulo.

GOLD MEDAL.
Instituto Lauro Sodré, Pará.
Instituto Profissional Masculino, Rio de Janeiro.
Collaborators of (a)
Casa dos Expostos, Rio de Janeiro.
Orphans da Santa Casa, Rio de Janeiro.
Asylo S. Cornelio, Rio de Janeiro.

SILVER MEDAL.
Instituto Benjamin Constant, Amazonas.
Instituto Profissional Feminino, Rio de Janeiro.

BRONZE MEDAL.
Secretaria do Interior, Bahia.
Collaborators:
D. Eliza Usel de Andrade, Bahia.
Collegio 8 de Dezembro, Bahia.

GROUP 8.
Special Forms of Education.

GRAND PRIZE.
Governo do Estado, Amazonas.
Museo Paulista, S. Paulo.

GOLD MEDAL.
Instituto Historico e Geographico, S. Paulo.
Instituto Geographico e Historico, Bahia.
Museo Paraense, Pará.
Collaborator of above group:
Mr. J. B. da Motta, Rio de Janeiro.

SILVER MEDAL.
Spindola, Siqueira & Co., S. Paulo.
Miguel Melillo & Co., S. Paulo.

BRONZE MEDAL.
W. Rotermund, Rio Grande do Sul.
Ramon Roca Dordal, São Paulo.
Honorio Esteves, Minas Geraes.

DEPARTMENT OF ART

GROUP 9.
Paintings and Drawings.

GOLD MEDAL.
E. Visconti, Rio de Janeiro.

SILVER MEDAL.
A. de Figueiredo, Rio de Janeiro.
Oscar P. da Silva, S. Paulo.
Pedro Weingartner, Rio Grande do Sul.

BRONZE MEDAL.
Modesto Broccs, Rio de Janeiro.
A. Delpino, Minas Geraes.
J. Insley Pacheco, Rio de Janeiro.

GROUP 10.
Engravings and Lithographs.

BRONZE MEDAL.
Modesto Brocos, Rio de Janeiro.

GROUP 11.
Sculpture.

GOLD MEDAL.
A. G. Girardet, Rio de Janeiro.

BRONZE MEDAL.
Amadeu Zani, S. Paulo.

GROUP 14.
Original Objects of Art Workmanship.

BRONZE MEDAL.
E. Visconti, Rio de Janeiro.

DEPARTMENT OF LIBERAL ARTS

GROUP 15.

Typography—Various Printing Processes.

GRAND PRIZE.

Imprensa Nacional, Rio de Janeiro.

GOLD MEDAL.

Alfredo Rocha, Rio de Janeiro.
Collaborator of Imprensa Nacional.
Jorge Schmidt, Rio de Janeiro.

SILVER MEDAL.

E. Bevilacqua & Co., Rio de Janeiro.

BRONZE MEDAL.

A. Ribeiro, Rio de Janeiro.

GROUP 16.

Photography.

GOLD MEDAL.

Marc Ferrez, Rio de Janeiro.
J. Insley Pacheco, Rio de Janeiro.

SILVER MEDAL.

Secretaria da Agricultura, Bahia.
Virgilio Calegaria, Rio Grande do Sul.
Dr. F. P. Ramos de Azevedo, S. Paulo.
Guilherme Gaensly, S. Paulo.
Pedro Gonçalves da Silva, Bahia.
Valerio Vieira, S. Paulo.

BRONZE MEDAL.

Governo do Estado, Rio Grande do Sul.
João Sarracini, S. Paulo.
Luiz Voelcker & Co., Rio Grande do Sul.
Ziul, Rio Grande do Sul.

GROUP 17.

Books and Publications—Book Binding.

GRAND PRIZE.

Bibliotheca Nacional, Rio de Janeiro.
Imprensa Nacional, Rio de Janeiro.
Secretaria do Interior, Rio de Janeiro.
Dr. Barbosa Rodrigues, Rio de Janeiro.

GOLD MEDAL.

Dr. Lauro Müller, Rio de Janeiro.
Collaborator of Secretaria da Industria e Viação (group 18)
Dr. Leopoldo Bulhões, Rio de Janeiro.
Collaborator of Imprensa Nacional.
Dr. J. J. Seabra, Rio de Janeiro.
Collaborator of Secretaria do Interior.
Dr. A. da Graça Couto, Rio de Janeiro.
Collaborator of Secretaria do Interior.
Dr. Barbosa Rodrigues, Rio de Janeiro.
Collaborator of Secretaria do Interior.
F. Alves & Co., Rio de Janeiro.
M. L. Buhnaeds & Co., S. Paulo.
Bevilacqua & Co, Rio de Janeiro.
Secretaria da Agricultura, S. Paulo.
Duprat & Co., S. Paulo.
Governo do Estado, Rio Grande do Sul.
H. Garnier, Rio de Janeiro.
Laemmert & Co., Rio de Janeiro.
Instituto Polytechnico Brazileiro, Rio de Janeiro.
Vanorden & Co., S. Paulo.
Dr. A. C. Lopes Conçalves, Amazonas.

SILVER MEDAL.

Dr. José Americo dos Santos, Rio de Janeiro.
Carlos Gerke, S. Paulo.
L. P. Barcellos & Co., Rio Grande do Sul.
Commissão da Exposição Preparatoria de S. Paulo, S. Paulo.
Echenique Irmãos & Co., Rio Grande do Sul.
Governo do Amazonas, (F. A. Fidanza) Amazonas.
George Humphrey, Amazonas.
Krahe & Co., Rio Grande do Sul.
Dr. Moncorvo Filho, Rio de Janeiro.
Dr. V. A. de Paula Pessoa, Rio de Janeiro.
Secretaria do Interior, Minas Geraes.
Sociedade de Geographia, Rio de Janeiro.
D. Maria C. da Cunha Santos, Rio de Janeiro.
Revista de Engenharia, Rio de Janeiro.
Commissão da Imprensa, S. Paulo.

BRONZE MEDAL.

Archivo Publico, Pará.
D. Amelia de F. Bevilacqua, Rio de Janeiro.
Paulino de Brito, Amazonas.
Antonio Carvalho, Pará.
Candido Costa, Pará.
Dr. H. Lopes de Campos, Amazonas.
Domenico Micucci, S. Paulo.
F. Rabello, Maranhão.
Gaensly & Co., S. Paulo.
Imprensa do Estado, Rio Grande do Sul.
Dr. Eladio Lima, Pará.
Frias & Co., Maranhão.
Barão de Marajó, Amazonas.
D. Aurea Pires, Rio de Janeiro.
C. Municipal de Porto Alegre, Rio Grande do Sul.
Quarto Districto Agronomico de S. Paulo, S. Paulo.
Ferreira da Rosa, Rio Grande do Sul.
Luiz Roberti, Rio Grande do Sul.
W. Rottermund, Rio Grande do Sul.
Annibal Rocha & Co., Paraná.
Souza & Barros, Rio Grande do Sul.
Camara Municipal de Sertãosinho, S. Paulo.
Francisco Schmidt, S. Paulo.
Barão de Sant' Anna Nery, Amazonas.
Dr. Ferreira da Silva, Rio de Janeiro.
Dr. Nelson de Senna, Minas Geraes.
Antonio Monteiro de Souza, Amazonas.
A. O. Araujo Souza, Amazonas.
Silvio Senior, Amazonas.
Torquato Tapajoz, Amazonas.
Arthur Vianna, Amazonas.
José Verissimo, Amazonas.

GROUP 18.

Maps and Apparatus for Geography, Cosmography, Topography.

GRAND PRIZE.

Secretaria da Industria e Viação, Rio de Janeiro.

GOLD MEDAL.

Dr. J. Crockatt de Sá, Rio de Janeiro.
Collaborator of Secretaria da Industria e Viação.
Secretaria da Agricultura, S. Paulo.
Commissão Geographica, Minas Geraes.

SILVER MEDAL.

Alfredo Doux, Rio de Janeiro.
Collaborator of Sec. da Industria e Viação.
Prefeitura Municipal, Rio de Janeiro.
Laemmert & Co., Rio de Janeiro.
Governo do Estado, Sta. Catharina.

GROUP 19.

Instruments of Precision, Philosophical Apparatus, Etc.

BRONZE MEDAL.

G. Knack & Filhos, Rio Grande do Sul.

GROUP 20.

Medicine and Surgery.

BRONZE MEDAL.

Dr. Silvino de Mattos, Rio de Janeiro.
Reinaldo Schoeler, Rio Grande do Sul.

GROUP 21.

Musical Instruments.

GOLD MEDAL.

J. dos Santos Couceiro, Rio de Janeiro.
Zacharias D'Alô & Irmãos, S. Paulo.

SILVER MEDAL.

José Cypriani, Rio Grande do Sul.
Fernando Guerra, S. Paulo.
Francisco Pistorezi, S. Paulo.
Scavone & Co., S. Paulo.

BRONZE MEDAL.

Lorenço Fratelli, S. Paulo.
Arthur Diniz, S. Paulo.
Alberto Felhauer, Rio Grande do Sul.
Virgilio Giudice, S. Paulo.
Luiz Marsaioli, S. Paulo.

GROUP 23.

Chemical and Pharmaceutical Arts.

GRAND PRIZE.

Companhia Luz Estearica, Rio de Janeiro.

GOLD MEDAL.

Emilio Grandmasson, Rio de Janeiro.
Collaborator of Comp. Luz Estearica.
Abreu Sobrinho & Co., Rio de Janeiro.
Freire de Aguiar, Rio de Janeiro.
Bogaert & Co., S. Paulo.
Ch. Berthaud, Minas Geraes.
Alfredo de Carvalho & Co., Rio de Janeiro.
Daudt & Freitas, Rio Grande do Sul.
Comp. Drogas e Productos Chimicos, Pernambuco.
Francisco Giffoni & Co., Rio de Janeiro.
Jung & Co., Rio Grande do Sul.
Luiz Köhler, Rio Grande do Sul.
Dr. Van der Laan, Rio Grande do Sul.
Leivas Reis & Co., Rio Grande do Sul.
Carlos Meissner, S. Paulo.
L. de Queirós & Co., S. Paulo.
Schröder & Co., Rio Grande do Sul.
Alvaro Alberto da Silva, Rio de Janeiro
J. A. de Souza Soares, Rio Grande do Sul
Escola de Pharmacia, S. Paulo.
Paulo Simoni, Minas Geraes.
Eugenio Samico, Pernambuco.
Henrique J. Moers, (Gr. 25) Amazonas.

SILVER MEDAL.

V. Gomes de Araujo, Amazonas.
Bartholomeu & Co., Pernambuco.
Honor Camello, Rio Grande do Sul.
T. Levy Camille & Co., Amazonas.
Raffaele Galvanese, S. Paulo.
Dr. José Fialho Dutra, Rio Grande do Sul.
Victor Duchein, S. Paulo.
José Esteves Dias, Maranhão.
Collect A. Fonseca, Piauhy.
Pharmacia do Indio, Rio Grande do Sul.
Joaquim Isola, S. Paulo.
Laboratorio Goulart, Rio Grande do Sul.
Eduardo Madeira, S. Paulo.
Antero de Paula Madureira, S. Paulo.
C. Martin & Co., S. Paulo.
Luiz C. de Arruda Mendes, S. Paulo.
Augusto Cezar Marques, Maranhão.
João Vital de Mattos & Irmãos, Maranhão.
G. Nogueira & Co., S. Paulo.
Dr. J. M. de Argollo Nobre, Bahia.
Domingos José de Oliveira, Rio Grande do Sul.
Pasquier & Fischer, Rio Grande do Sul.
Hermes de Souza Pereira, Pernambuco.
Prates & Guimarães, Minas Geraes.
A. G. Roxo, S. Paulo.
H. Rouquayrol & Co., Pernambuco.
Alpheu Rapozo, Pernambuco.
Silva Paranhos & Co., Rio de Janeiro.
Antonio Maria dos Santos, Rio Grande do Sul.
Raphael Scaciota, S. Paulo.
Floriano Serpa, Bahia.
Adolpho Voigt, Rio Grande do Sul.

BRONZE MEDAL.

Luiz Cardoso de Azevedo, Rio Grande do Sul.
Alberto de Azevedo, Amazonas.
Francisco Pinto Brandão, Rio de Janeiro.
Dario Barros, Rio Grande do Sul.
A. Barcellos, Rio Grande do Sul.
Sarmento Barata, Rio Grande do Sul.
Miguel Brazil, Rio Grande do Sul.
Gracindo de Brito, Bahia.
Brito & Co., S. Paulo.
A. Guimarães Certain, Rio de Janeiro.
Cruz & Co., Pernambuco.
Luiz Carlos, S. Paulo.
Agrario B. de Carvalho, Bahia.
Antonio Camillo & Genro, Minas Geraes.
Dr. Julio Calazans, Bahia.
Nicolao Dapelo & Recco, Rio Grande do Sul.
Oscar & Carvalho, Paraná.
Anjos Ferreira & Co., Paraná.
Dr. Victor Fischel, Rio Grande do Sul.
Souza Franco & Co., Rio Grande do Sul.
B. de Senna Figueiredo, Minas Geraes.
Dr. Nogueira Flores, Rio de Janeiro.
Kahn Freres, S. Paulo.
Lopes & Faral, Rio Grande do Sul.
Joaquim Lagunilha, Rio Grande do Sul.
J. G. Moojen, Rio Grande do Sul.
Nicolao Koeler, Rio Grande do Sul.
Cecilio Monza, Rio Grande do Sul.
Antonio Camillo de Oliveira, Minas Geraes.
Egydio Nocetti, Sta. Catharina.
Luiz Cardoso de Oliveira, Rio Grande do Sul.
Drogaria Pizarro, Rio de Janeiro.
Dr. Brito Passos, Maranhão.
Anysio Palhano, Maranhão.
F. O. Monteiro, Amazonas.
J. Pedro Ribeiro, Maranhão.
Reichert Irmãos, S. Paulo.
J. Constantino da Rocha, Rio Grande do Sul.
Rocha & Remião, Rio Grande do Sul.
José Victorino da Rocha, Rio Grande do Sul.
Stefano Rocco, Rio Grande do Sul.
Antero Rocha, Minas Geraes.
Antonio Rabello & Filhos, Parahyba.
Dr. José Salerio, S. Paulo.
João Silva, Rio Grande do Sul.
Pharmacia União, Rio Grande do Sul.
João Mayer Jr. Rio Grande do Sul.

GROUP 24.

Manufacture of Paper.

GOLD MEDAL.

Garcia, David & Co., Rio de Janeiro.

SILVER MEDAL.

M. L. Buhnaeds & Co., S. Paulo.

BRONZE MEDAL.

Camargo Freitas & Co., Paraná.
Hugo Gertum & Co., Rio Grande do Sul.
Narciso Sturlini, S. Paulo.

GROUP 25.

Civil and Military Engineering.

GOLD MEDAL.

A. P. Rodovalho, S. Paulo.

SILVER MEDAL.

Comp. Melhoramentos de S. Paulo, S. Paulo.
Commissão de S. Francisco, Sta. Catharina.
D. Amelia A. ba Silva Ramos, Minas Geraes.

GROUP 26.

Model, Plans and Designs for Public Works.

GOLD MEDAL.

M. de Teive e Argollo, Bahia.
Secretaria da Agricultura, S. Paulo.
Manaos Harbor Co., (Gr. 17) Amazonas.

SILVER MEDAL.

Governo do Estado, Rio Grande do Sul.
Prefeitura, Rio de Janeiro.

GROUP 27.

Architectural Engineering.

GRAND PRIZE.

Governo do Brazil, Rio de Janeiro.
Brazilian Pavilion L. P. Exposition.
Col. F. M. de Souza Aguiar, Collaborator of Governo do Brazil. Rio de Janeiro.
Dr. Ramos de Azevedo, S. Paulo.

GOLD MEDAL.

Casa de Correcção, Rio de Janeiro.
Francisco Soucasaux, Minas Geraes.

SILVER MEDAL.

Victor Dubugras, S. Paulo.

BRONZE MEDAL.

Secretaria do Governo, Amazonas.
Ernesto Mattoso, Amazonas.

DEPARTMENT OF MANUFACTURES

GROUP 28.

Stationary.

SILVER MEDAL.

Vellozo & Co., Paraná.

BRONZE MEDAL.

H. Riedel, Rio Grande do Sul.

GROUP 31.

Jewelry.

BRONZE MEDAL.

Felippe Jeanselme da Silva, Rio Grande do Sul.

GROUP 32.

Clock and Watch Making.

BRONZE MEDAL.

Francisco Carlos Kirchkoff, Rio Grande do Sul.

GROUP 33.

Production in Marble, Bronze, Cast Iron and Wrought Iron.

BRONZE MEDAL.

Adamo Capelli, S. Paulo.

GROUP 34.

Brushes, Fine Leather Articles, Fancy Articles and Basket Works.

GOLD MEDAL.

Geo. R. Petersen, Rio Grande do Sul.

SILVER MEDAL.

Alberto Jacobsen, Rio de Janeiro.
Oscar Schaitza, Rio Grande do Sul.

BRONZE MEDAL.

C. M. de Feira de Sant' Anna, Bahia.
Angelo Fracalanza, S. Paulo.
Cezar Varonese & Co., Amazonas.

GROUP 35.

Articles for Traveling and for Camping, India Rubber and Gutta Percha Industries.

GRAND PRIZE.

Dr. Graça Couto, Maranhão.
Manoel Joaquim Marinho, Rio de Janeiro.

GOLD MEDAL.

Francisco M. Wanderley, Matto Grosso.
Moreira & Irmão, Maranhão.
Palhano & Passos, Maranhão.
Pedro Leite Osorio, Matto Grosso.

SILVER MEDAL.

Generosa da Silva Cunha, Goyaz.
Joaquim Rabello, Maranhão.
Pedro C. do Couto, Matto Grosso.
Vicente Orlando, Matto Grosso.

BRONZE MEDAL.

Commissão do Estado, Maranhão.
Dr. Arnaldo Novis, Matto Grosso.

GROUP 37.

ecoration and Fixed Furniture of Building and Dwelling.

BRONZE MEDAL.

Boher, Irmãos, & Co., Rio de Janerio.

GROUP 38.

Office and Household Furniture.

GOLD MEDAL.

Lyceo de Artes e Officios de S. Paulo, S. Paulo
Auler & Co., Rio de Janerio.

SILVER MEDAL.

Arbós & Salvador, Rio Grande do Sul.

BRONZE MEDAL.

Tunnes & Co., Rio de Janerio.
Saturnino Pereira dos Santos, Amazonas.
G. Steigleder Sobrinho, Rio Grande do Sul.
Francisco Herzog, Rio Grande do Sul.
Marcenaria Moderna, Amazonas.
Gustavo Reil, Santa Catharina.
Christiano F. Gruber & Filho, Rio Grande do Sul
Julio Oder, Rio Grande do Sul.
Carlos Stephano, Paraná.

GROUP 39.

Stained Glass.

BRONZE MEDAL.

José Walmann, Rio Grande do Sul.

GROUP 41.

Hardware.

GOLD MEDAL.

Cabral & Co., Rio de Janeiro.

SILVER MEDAL.

Henrique Becker, Rio Grande do Sul.

BRONZE MEDAL.

Fundição Americana, Rio de Janeiro.
Mosna Bortola, Rio Grande do Sul.
E. Berta & Co., Rio Grande do Sul.
João Gerdan, Rio Grande do Sul.
Carl Hoepke & Co., Sta. Catharina.
Casa de Correcção, Rio Grande do Sul.
G. Knack & Filhos, Rio Grande do Sul.
F. Sanders, Rio Grande do Sul.
Rodolpho Schmidt, Paraná.
A.Teixeira, Minas Geraes.
Luis Torre, S. Paulo.
Jeronymo Riolffi & Filho, Rio Grande do Sul.

GROUP 45.

Ceramics.

GOLD MEDAL.

Governo do Brazil, Rio de Janeiro.
Collective Exhibit of Pottery.

SILVER MEDAL.

Companhia Mechanica e Importadora, S. Paulo.

Frederico de Montigny, Rio Grande do Sul.
José Robiatti, Rio Grande do Sul.
Germano Steigleder Sobrinho, Rio Grande do Sul.
J. R. Almeida, Amazonas.
Olaria Andressen, Amazonas.
Carlos & Co., Rio Grande do Sul.
Sociedade Cooperativa V. Colombo, Paraná.

GROUP 47.

Glass and Crystal.

SILVER MEDAL.

Fabrica Esberard, Rio de Janeiro.
João Uras, São Paulo.

BRONZE MEDAL.

Crystalleria Soryemich, S. Paulo.
Fabrica de Crystaes e Vidros, Rio de Janeiro.
Hagstd & Co., Rio Grande do Sul.
Henrique Pinder, Rio Grande do Sul.

GROUP 48.

Apparatus and Processes for Heating and Ventilation.

BRONZE MEDAL.

João Raminelli, Rio Grande do Sul.

GROUP 54.

Threads and Fabrics of Cotton.

GRAND PRIZE.

Comp. Brazil Industrial, Rio de Janeiro.

GOLD MEDAL.

Comp. F. e Tecidos Alliança, Rio de Janeiro.
Comp. Tecelagem Italo Brazileira, Rio Grande do Sul.
Comp. Industrial Sabarense, Minas Geraes.
Comp. Italo Brazileira, Rio Grande do Sul.
Comp. Fiação e Tecidos de Pernambuco. Pernambuco.
Fabrica de Tecidos de Camaragibe, Pernambuco.
Comp. Industrial Pernambucana, Pernambuco.
Fabrica da Torre, Pernambuco.
José Weissohn & Co., São Paulo.

SILVER MEDAL.

Comp. União Fabril, Rio Grande do Sul.
Comp. Cachoeira de Macacos, Minas Geraes.
Cruz & Co., Sergipe.
Comp. Fabril Paulistana, S. Paulo.
Manoel Guedes, S. Paulo.
M. José da Fonseca, S. Paulo.
Rodolpho Miranda, S. Paulo.

BRONZE MEDAL.

Viuva Barreto, Rio Grande do Norte.
Comp. F. e Tecidos União Lavrense, Minas Geraes.
Comp. Manufactureira & Agricola, Maranhão.
Comp. Manufactureira do Codó, Maranhão.
Comp. F. e Tecidos, Pernambuco.
Candido José Ribeiro, Maranhão.
Commissão do Piauhy, Piauhy.
Comp. Fabrica Anhaia, S. Paulo.
Fabrica de Tecidos Parahybana, Parahyba.
Henrique de Araujo, Matto Grosso.
Fabrica S. Luiz, Maranhão.
Pereira Mendes & Co., S. Paulo.
Paulo Schlemm, Santa Catharina.
Banco União, S. Paulo.
C. G. Dohler & Co., Sta. Catharina.

GROUP 55.

Threads and Fabrics of Vegetable Fibres Other than Cotton.

GRAND PRIZE.

Governo do Brazil, Federal Capital.
General Exhibit.
Silva Telles & Co., São Paulo.

GOLD MEDAL.

Comp. Tecelagem Italo-Brazileira, Rio Grande do Sul.
Comp. União Fabril, Rio Grande do Sul.
Silva Freitas & Comp., S. Paulo.
Comp. Fiação e Tecidos Porto Alegrense, Rio Grande do Sul.
A. Alvares Penteado, S. Paulo.
Henrique Maggi, S. Paulo.

SILVER MEDAL.

Luiz M. Pinto de Queirós, S. Paulo.

BRONZE MEDAL.

Fred. Giustie & Co., Rio Grande do Sul.
Comp. Industrial Sabarense, Minas Geraes.
Oscar Schaitza, Rio Grande do Sul.

GROUP 58.

Laces, Embroidery and Trimming.

SILVER MEDAL.

D. Eulalia Aguiar, Rio de Janeiro.
D. Eulalia Barbosa Bica, Rio de Janeiro.
D. Jenny Aguiar, Rio de Janeiro.

BRONZE MEDAL.

D. Antonia M. Chaves, Maranhão.
D. Maria I. da Silva, Maranhão.

GROUP 60.

Leather, Boots and Shoes, Furs and Skins, Fur Clothing.

GRAND PRIZE.

Companhia Progresso Industrial, Rio Grade do Sul.
Secco & Cia., Rio Grande do Sul.

GOLD MEDAL.

Francisco Bernert, Paraná.
Coelho da Rocha & Co., S. Paulo.
C. A. Dick & Co., S. Paulo.
Ferreira Costa & Co., Rio Grande do Sul.
Guilherme Marroco, Pará.
Greiner & Abascal, Rio Grande do Sul.
Annibal Kessler, Rio Grande do Sul.
Antonio Kluppel, Paraná.
Lothario Pereira & Co., Paraná.
Pessoa da Silva & Co., Parahyba.
Rossbach Bros., Bahia.
José Sans, Minas Geraes.
Otto Schelenker, Paraná.
Silva Gomes & Irmão, Rio Grande do Sul.
Souza Aguiar & Co., São Paulo.
Oscar Schaitza & Co., Rio Grande do Sul.
João Carlos Vianna, Rio Grande do Sul.
R. Rossi Verrone, S. Paulo.

SILVER MEDAL.

Doris Freres, Ceará.
Escola Dom Bosco, Minas Geraes.
J. F. de Figueiredo, S. Paulo.
Ferraz Fester & Co., S. Paulo.
João de Souza Ferreira, Paraná.
C. M. de Feira de Sant' Anna, Bahia.
Padre Manoel Gomez Oliveira, Matto Grosso.
Julio Marroco, Pará.
Silva Paranhos & Co., Rio de Janerio.
Santos & Irmão, Minas Geraes.
Comm. de Feira de Sant' Anna, Bahia.

BRONZE MEDAL.

Commissão de Florianopolis, Sta. Catharina.
Affonso, Carvalho & Co., Minas Geraes.
Casa de Correcção, Rio Grande do Sul.
José Evaristo Monteiro, Parahyba.
Commissão de Joinville, Santa Catharina.
Penitenciaria, Bahia.

GROUP 61.

Various Industries Connected with Clothing.

GRAND PRIZE.

Mme. Alice Jacobson, Rio de Janerio.
J. L. Fernandes Braga, Rio de Janerio.
Adolpho Schritzmeyer & Co., São Paulo.
Oscar Teichman, Rio Grande do Sul.

GOLD MEDAL.

José Bastos, Rio Grande do Sul.
Anacleto P. Bueno, Paraná.
F. Chiaradia & Irmão, Rio Grande do Sul.
Ferraz, Fester & Co., S. Paulo.
Julio Lima & Co., Rio de Janeiro.
Libero Venturini & Co., Rio Grande do Sul.
Dario del Panta, S. Paulo.
Alcides H. Pertica, S. Paulo.
Libero Venturini, Rio Grande do Sul.
José Fraaquim, Paraná.

SILVER MEDAL.

Commissão M. de Alagoinhas, Bahia.
Madame J. Bataglia, Pará.
Berto Bertacco & Co., Rio Grande do Sul.
Commissão do Estado, Amazonas.
Governo do Estado, Amazonas.
Giachi & Cerri, S. Paulo.
Mayser & Kessler, Rio Grande do Sul.
Comp. Fabril Porto Alegrense, Rio Grande do Sul.
Madame M. Jacometti Matteo, Rio Grande do Sul.
J. Pabst & Co., Rio Grande do Sul.
Carlos Schneider, Santa Catharina.
Oscar Schaitza, Rio Grande do Sul.
F. Tannhauser, Rio Grande do Sul.

BRONZE MEDAL.

P. Schlemm, Santa Catharina.
Eduardo Sommer, Rio Grande do Sul.
P. Tannhauser, Rio Grande do Sul.
Francisco Weigang, Paraná.
Commissão de S. Francisco, Santa Catharina.
J. A. de Almeida & Co., Pernambuco.
J. Bosisio & Filho, S. Paulo.
Casa de Correcção, Rio Grande do Sul
Colonia Lucena, Paraná.
C. M. de Feira de Sant' Anna, Bahia.
Comm. de Feira de Sant' Anna, Bahia.
Max Friedrich, Santa Catharina.
Joaquim Isola, S. Paulo.
Keiser & Co., Santa Catharina.
Santo Gusi, Rio Grande do Sul.
Clemente Peluso, Santa Catharina.
F. de Sousa Ferreira, S. Paulo.

DEPARTMENT OF MACHINERY

GROUP 62.

Steam Engines.

SILVER MEDAL.

José Becker & Irmão, Rio Grande do Sul.

DEPARTMENT OF ELECTRICITY

GROUP 70.
Telegraphy and Telephony.

GRAND PRIZE.

Repartição Geral dos Telegraphos, Rio de Janeiro.

GROUP 71.
Various Applications of Electricity.

GOLD MEDAL.

Intendencia de Manaos, Amazonas.
Eduardo Loschi, S. Paulo.
Manaos Railway, Amazonas.
Dr. F. F. Ramos, S. Paulo.
Francisco Soucasaux, Minas Geraes.
S. Paulo Tramway, Light & Power Co., S. Paulo.

SPECIAL AWARD.

Dr. A. J. da Costa Couto, Rio de Janeiro. Collaborator.

DEPARTMENT OF TRANSPORTATION

GROUP 72.
Carriages and Wheelwrights' Work.

GRAND PRIZE.

Corpo de Bombeiros, Rio de Janeiro.

BRONZE MEDAL.

Luiz Rothfuchs & Irmão, Rio Grande do Sul.

GROUP 73.
Saddlery and Harness.

GOLD MEDAL.

Ferreira Costa & Co., Rio Grande do Sul.
Schneider & Co., Rio Grande do Sul.

SILVER MEDAL.

Corpo de Bombeiros, Rio de Janeiro.
Brúggman, Pereira & Co., Rio Grande do Sul.
Cunha Guimarães & Co., Rio de Janeiro.
Bernardo Rudolf, Rio Grande do Sul.
Luiz Rothfuchs & Irmão, Rio Grande do Sul.

BRONZE MEDAL.

Felippe Mohr & Filho, Rio Grande do Sul.
Francisco Maineri & Irmão, Rio Grande do Sul.
Zeferino Rocha & Filho, Rio Grande do Sul.
Victor Henrique da Silva, Rio Grande do Sul
Greiner & Abascal, Rio Grande do Sul.

GROUP 74.
Railways.

GOLD MEDAL.

Governo do Brazil Rio de Janeiro.
Miguel de T. Argollo, Bahia.
Secretaria de Agricultura, S. Paulo.
E. de F. Central do Brazil, Rio de Janeiro.
Great Western of Brazil Railway, Pernambuco.
Leopoldina Railway, Rio de Janeiro.
E. de F. Minas & Rio, Rio de Janeiro.
Manaos Railway, Amazonas.
Dr. V. A. de Paula Pessoa, Rio de Janeiro.
Companhia Progresso Cuyabano, Matto Grosso.

GROUP 75.
Material and Equipment used in the Mercantile Marine.

BRONZE MEDAL.

José Becker & Irmão, Rio Grande do Sul.
Capitania do Porto, Amazonas.
Secretaria da Industria e Viação, Rio de Janeiro.
Dr. R. P. Rawlinson, Pernambuco.

DEPARTMENT OF AGRICULTURE

GROUP 79.
Agricultural Implements and Farm Machinery.

GRAND PRIZE.

Comp. Mechanica & Importadora, S. Paulo.

GOLD MEDAL.

Carlos Lessa, S. Paulo.

SILVER MEDAL.

F. Pedro de Souza Mello, S. Paulo.
Raphael Stamato, S. Paulo.

BRONZE MEDAL.

Pedro A. Santangelo, S. Paulo.
Ernesto Kerber, Rio Grande do Sul.
Leopoldo dos Santos, S. Paulo.
F. Sanders, Rio Grande do Sul.

GROUP 81.
Tobacco.

GRAND PRIZE.

Secretaria da Agricultura da Bahia, Bahia.
Dannemann & Comp., Bahia.
Poock & Comp., Rio Grande do Sul.
Adolpho Cisalpino de Carvalho, Minas Geraes.

GOLD MEDAL.

Mendes Correia & Co., Pará.
Commissão de Estado, Sta. Catharina.
Domingos Maciel, Paraná.
Antonio Ribeiro Pereira, Minas Geraes.
Irmãos Tiburcio, Minas Geraes.
Dario Guedes, Minas Geraes.
Odulfo Cardoso, Minas Geraes.

Siqueira & Cia., Rio de Janeiro.
Col. Eugenio Jardim, Rio de Janeiro.
Dr. Alexandre Carlos da Silva, Bahia.
José Francisco Correa & Cia., Rio de Janeiro.
Francisco Seidel, Paraná.
Augusto O. de Moraes Guimarães, Maranhão.
J. F. Correa & Comp., Rio de Janeiro.
Manuel Pacheco, Bahia.
Andrade & Andrade, Minas Geraes.
Costa Ferreira & Penna, Bahia.

SILVER MEDAL.

Stone & Filhos, Amazonas.
João Simões & Co., Rio Grande do Sul.
Simão Moreno Monteiro, Rio Grande do Sul.
Joaquim Couto, Rio Grande do Sul.
Amaro da Silveira & Comp., Rio Grande do Sul.
Jorge Müller, Rio Grande do Sul.
Jacob Hartman Sobrinho, Rio Grande do Sul.
João Antonio de Oliveira, Paraná.
Joaquim Gonçalves Guimarães, Paraná.
João Freire Rodrigues, Paraná.
A. F. Motta, Bahia.
E. J. Souza, Bahia.
Antonio José Soares, E. do Rio de Janeiro.
Stumpe & Studer, Bahia.
Siqueira & Co., Rio de Janeiro.
A. da Silveira & Co., Rio Grande do Sul.
Domingos Martins & Co., Rio Grande do Sul.
Mendes & Santos, Minas Geraes.
Azevedo & Co., Pernambuco.
José Gonçalves Bastos, Amazonas.
Guimarães & Co., Goyaz.
H. Rohde, Rio Grande do Sul.
Commissão de Itacoatiara, Amazonas.

BRONZE MEDAL.

Sociedade Cooperativa do Rio do Cedro, Sta. Catharina.
Mendes & Santos, Minas Geraes.
Leite & Alves, Bahia.
Rodolpho Altenburg & Cia., Santa Catharina.
A. Miranda, S. Paulo.
Estação Agronomica de Blumenau, Santa Catharina.
José Roerbel, Paraná.

GROUP 83.

Theory of Agriculture.

GRAND PRIZE.

Secretaria da Agricultura, S. Paulo.

SILVER MEDAL.

Instituto Agronomico, S. Paulo.

BRONZE MEDAL.

Commissão Geologica, S. Paulo.
Escola de S. João da Montanha, S. Paulo.

GROUP 84.

Vegetable Food Products—Agricultural Seeds, Coffee.

GRAND PRIZE.

Governo do Brazil, Rio de Janeiro.
General Exhibit.
Commissão Brazileira, em St. Louis, Rio de Janeiro.
General Arrangement of Exhibits.
Dr. Carlos Botelho, S. Paulo.
Centro do Commercio de Cereaes, Rio de Janeiro.
Estado de S. Paulo, S. Paulo.
Dr. José Cardoso de Moura Brazil, E. do Rio de Janeiro.
Sociedade Paulista d'Agricultura, Commercio e Industria, S. Paulo.

GOLD MEDAL.

Secretaria da Industria e Viação, Rio de Janeiro.
Comm. Organisadora e Preparatoria, Collaborators, S. Paulo.
Queiroz Barros & Cia., S. Paulo.
B. Ribeiro Ferreira & Cia., S. Paulo.
Raphael Sampaio & Cia., S. Paulo.
Dr. Rodrigo Pereira Barreto, S. Paulo.
Raul de Rezende Carvalho & Irmão, S. Paulo.
Salles Toledo & Cia., S. Paulo.
Silva Ferreira & Cia., S. Paulo.
Souza Queiroz & Amaral, S. Paulo.
Fonseca Costa Irmão, Rio de Janeiro.
Teixeira Borges & Co., Minas Geraes.
Telles Quirino & Nogueira, S. Paulo.
Whitaker & Bomfim, S. Paulo.
Theodor Wille & Cia., S. Paulo.
Francisco de Salles Pupo, S. Paulo.
Ferreira da Rosa & Cia., S. Paulo.
Ignacio Penteado & Cia., S. Paulo.
João Calietal, Paraná.
João Procopio & Irmão, S. Paulo.
Dr. João Teixeira Soares, Minas Geraes.
Dr. José Cardoso de Almeida, São Paulo.
E. Johnston & Cia., São Paulo.
Jorge de Moraes & Cia., S. Paulo.
Junqueira & Cia., São Paulo.
Junta Commercial de Manaos, Amazonas.
Luiz A. Pinto, S. Paulo.
Lacerda & Piza, S. Paulo.
Dr. Luis Augusto Pinto, S. Paulo.
Leite & Santos, S. Paulo.
Lara Campos, Toledo & Co., S. Paulo.
Malta & Cerquinho, S. Paulo.
Maia & Ribeiro, S. Paulo.
Marques, Valle & Cia., S. Paulo.
C. Municipal de Garibaldi, Rio Grande do Sul.
Major José da Cunha Pires, Rio de Janeiro.
Old Fazenda, S. Paulo.
Dr. Olavo Egydio de Souza Aranha, S. Paulo.
Rodrigues Alves & Irmão, S. Paulo.

Pinto de Almeida & Cia., S. Paulo.
Pedro Ferreira de Camargo, S. Paulo.
Pedro Alexandrino de Almeida & Cia., S. Paulo.
Prestes Penteado & Branco, S. Paulo.
Prado Lima & Cia., S. Paulo.
Avellar & Co., Minas Geraes.
Argollo, Cardoso & Co., Bahia.
Alves Lima & Cia., S. Paulo.
Almeida Mello & Cia., S. Paulo.
Dr. Alberto de Oliveira, S. Paulo.
A. Bove, S. Paulo.
Carlos Weber, Rio Grande do Sul.
Carlos B. de Magalhães, S. Paulo.
Carl Hellwig & Cia., S. Paulo.
Dr. Carlos Botelho, S. Paulo.
Centro de Commercio de Café, Rio de Janeiro.
Commissão de Porto Alegre, Rio Grande do Sul.
Com. Polaca, Paraná.
Conceição & Cia., S. Paulo.
Companhia Agricola Fazenda Dumont, S. Paulo.
H. Costa Reis, Irmão & Comp., Rio de Janeiro.
Coronel Francisco Schmidt, S. Paulo.
Coronel José Paulino Nogueira, S. Paulo.
Coronel José Ferreira de Figueiredo, S. Paulo.
Commissarios de Café de Santos, S. Paulo.
Dias Garcia & Co., Rio de Janeiro.
Dr. Delfim Moreira, Minas Geraes.
Diederichsen & Jordão, S. Paulo.
Delfino Martins & Co., S. Paulo.
Dias, Irmãos & Cia., S. Paulo.
Eduardo de Araujo & Comp., Rio de Janeiro.
Ellis & Netto, S. Paulo.

SILVER MEDALS.

Camara Municipal de Sertãosinho, S. Paulo.
Abilio Soares, S. Paulo.
Augusto Bobrowski, Paraná.
Armindo Lessa, E. do Rio de Janeiro.
Araujo Maia & Co., Minas Geraes.
Arthur Diederichsen, S. Paulo.
Alipio Luiz Dias, S. Paulo.
Antonio Lutterbach, E. do Rio de Janeiro.
Antonio Olyntho Ribeiro, Minas Geraes
Antonio Paganello, Rio Grande do Sul.
Antonio Morato de Almeida Lara, S. Paulo.
Antonio Franco de Arruda, S. Paulo.
Belchior Pimenta de Abreu, Minas Geraes.
Barão de Aguas Claras, E. do Rio de Janeiro.
Banco da Lavoura e do Commercio, S. Paulo.
E. Agricola de Blumenau, Sta. Catharina.
Bibiano F. da Rosa, Minas Geraes.
L. Carvalho & Co., Minas Geraes.
Carlos Berenstein, Rio Grande do Sul.
Camara Municipal de S. Simão, S. Paulo.
Camara Municipal de Ribeirão Preto, S. Paulo.
Companhia Oriente, Minas Geraes.
Cezar Duque Estrada & Co., Minas Geraes.
Col. Francisco Gomes Vieira, S. Paulo.
Com. de Iguassú, Sta. Catharina.
Commissão de Castro, Paraná.
Commissão de Curityba, Paraná.
Comp. Antarctica, S. Paulo.
Commissão de Sto. Antonio, Paraná.
Commissão de Paranaguá, Paraná.
Col. João José Alves Junior, E. do Rio de Janeiro.
Col. A. B. Monteiro de Barros, Minas Geraes.
Companhia Agricola de Ribeirão Preto, S. Paulo.
Coronel Getulio de Carvalho, S. Paulo.
Coronel Delfino M. de Siqueira, S. Paulo.
Diogo A. de Freitas, Paraná.
Duarte & Co., Minas Geraes
Eliziario Ferreira de C. Andrade, S. Paulo.
Elias A. de Moraes, E. do Rio de Janeiro.
Eliziario Ferreira de Camargo Andrade S. Paulo.
Francisco Valverde de Miranda, E. do Rio de Janeiro.
Francisco Pereira Garcia S. Paulo.
Francisco Salles V. Machado, Espirito Santo.
Fratelli Puglise Carbone & Cia., S. Paulo.
Felisbina Schell, Rio Grande do Sul.
Fazenda de S. José do R. Preto, E. do Rio de Janeiro.
Fazenda de St. Anna de Tres Ilhas, E. do Rio de Janeiro.
Fazenda de S. Martinho, Minas Geraes.
Fernandes Velloso & Co., Minas Geraes.
Guimarães Gonçalves & Co Minas Geraes.
F. Gomes, S. Paulo.
M. L. Garcia Junior, E. do Rio de Janeiro.
Gabriel Antonio da Silva Oliveira, S. Paulo.
Gabriel d' Andrade Junqueira, Minas Geraes.
Gouvea Brandão & Co., Minas Geraes.
Garcia, Pereira & Co., Rio de Janeiro.
Machado, Guimarães, Horta, Santos & Co., Rio de Janeiro.
Ignacio Penteado, S. Paulo.
Dr. João B. de O. Arruda, S. Paulo.
José Vicente X. Lisboa, Minas Geraes.
João Carneiro Santiago Junior, Minas Geraes.
José Rodrigues de Sampaio, S. Paulo.
Joaquim Candido de Oliveira, S. Paulo.
Colonia S. C. de Jesus, Matto Grosso.
Jacob Selbach Junior, Rio Grande do Sul.
Dr. Jambeiro Costa, S. Paulo.
Leonard Streid, Rio Grande do Sul.
Lacerda Piza & Irmão, S. Paulo.
Luiz Teixeira de Barros, S. Paulo.
Messias Franco, S. Paulo.
Mario O. Ribeiro de Oliveira, S. Paulo.
Marianno Moscardi, Paraná.

Martins & Co., Rio de Janeiro.
J. Montes & Co., Rio de Janeiro.
Martins de Siqueira, S. Paulo.
Monteiro Palto & Irmão, S. Paulo.
Major Manoel Francisco Moreira Marcondes, S. Paulo.
Monteiro de Barros & Martins, S. Paulo.
A. A. Mendes Borges, S. Paulo.
Monnerat Lutterbach & Co., Minas Geraes.
Dr. Octavio da Silva Leme, S. Paulo.
Pedro Auler, Rio Grande do Sul.
Paulo e Prado, S. Paulo.
A. Pereira Tavares, Rio Grande do Sul.
Rodolpho V. da Rocha Miranda, S. Paulo.
Silvino Egydio de Souza Aranha, S. Paulo.
Sec. da Agricultura, Bahia.
Thiago Mazagão, S. Paulo.
J. J. Torres & Co., Rio de Janeiro.

BRONZE MEDAL.

Dr. Abelardo de Cerqueira Cezar, S. Paulo.
C. Agusto Schrammel, Rio Grande do Sul.
Arthur C. Alves de Lima, S. Paulo.
Avelino & Couto, S. Paulo.
Affonso B. de A. Sampaio, S. Paulo.
Albino Cerqueira Leite, Minas Geraes.
Alfredo Lopes Martins, E. do Rio de Janeiro.
Antonio de Souza Queiroz, S. Paulo.
Dr. Antonio Melchert, S. Paulo.
Antonio de F. Lima, Minas Geraes.
Dr. Antonio S. de Alvarenga, S. Paulo.
André Villela de Andrade, S. Paulo.
Agostinho J. Moreira Rollo, S. Paulo.
Baroneza de Arary, S. Paulo.
Barão de Tatuhy, S. Paulo.
Baroneza de Limeira, S. Paulo.
Dr. Bento de Barros, S. Paulo.
Coelho Duarte & Co., Rio de Janeiro.
Candido Pereira Garcia, E. do Rio de Janeiro.
Dr. Carlos Paes de Barros, S. Paulo.
Capitão José Balbino Ribeiro, Minas Geraes.
Coronel José Teixeira Jr., S. Paulo.
Commissão de Lapa, Paraná.
Commissão do Estado, Sta. Catharina.
Col. Vicente Ferreira de Moraes, E. do Rio de Janeiro.
Col. José Monnerat, E. do Rio de Janeiro.
Colonel Frederico Branco, S. Paulo.
Colonel Floriano A. de Souza Camargo, S. Paulo.
Colonel Floriano de Souza Camargo, S. Paulo.
Francisco Aranha, S. Paulo.
Dr. A. Diniz Junqueira, E. do Rio de Janeiro.
Domiciano José Correa, S. Paulo.
Domingos da Silva Guimarães, Minas Geraes.
Eugenio Ferreira de Camargo, S. Paulo.
Eduardo Horn, Sta. Catharina.
Eduardo Brodes, S. Paulo.
Jorge Emmert, Rio Grande do Sul.
Franco de Camargo & Irmãos, S. Paulo.
Francisco B. P. Gomes, Minas Geraes.
Feliciano de Moraes, E. do Rio de Janeiro.
Fontana & Della Martha, Paraná.
Dr. Francisco Antonio de Souza Queiroz, S. Paulo.
Dr. Fellipe A. Caire, E. do Rio de Janeiro.
M. Frazão & Canellas, Minas Geraes.
Frazenda Bom Retiro, Minas Geraes.
Fazenda Colonia do Rio Preto, E. do Rio de Janeiro.
Honorio Luiz Dias, S. Paulo.
Honorio de Andrade Goulart, Minas Geraes.
Dr. Ignacio de Mendonça Uchoa, S. Paulo.
José do Amaral, Paraná.
João de Paula Mascarenhas, S. Paulo.
João de D. Flores, Rio Grande do Sul.
João G. Guimarães, Paraná.
João Maria, Paraná.
José Constancio Monnerat, E. do Rio de Janeiro.
João Urbano de Figueiredo, Minas Geraes.
João Guimarães, E. do Rio de Janeiro.
Josué Leite Ribeiro, Minas Geraes.
José Ribeiro da Costa Minas Geraes
Gregorio José Gonçalves, Minas Geraes.
José de Lacerda Soares, S. Paulo.
Dr. José de Souza Queiroz, S. Paulo.
Dr. José Ribeiro de Almeida Santos, S. Paulo.
Joaquim Dias, Minas Geraes.
Joaquim Sulpicio de Cerqueira Caldas, Matto Grosso.
Luiz Correa & Co., Rio de Janeiro.
Luiz Antonio de Souza Queiroz, S. Paulo.
D. Marianna Chagas, Minas Geraes.
Martins & Valle, Rio de Janeiro.
Dr. Martinho Prado, S. Paulo.
Martins & Irmão, S. Paulo.
Marinho Pinto & Co., Minas Geraes.
J. L. Mayrink, Minas Geraes.
D. Maria F. Pimentel Esteves, E. do Rio de Janeiro.
McKinley, Schmidt & Co., Rio de Janeiro.
Dr. Manuel Orlando Rodrigues, E. do Rio de Janeiro.
Miranda Jordão & Co., Minas Geraes.
Machado, Guimarães, Fernandes & Co., Minas Geraes.
Manoel Joaquim de Menezes, E. do Rio de Janeiro.
Monteiro Mattos & Co., Espirito Santo.
Orosimbo Maia, S. Paulo.
Luiz Gonçalves Fontes, E. do Rio de Janeiro.
Oscar T. de F. Cortes Minas Geraes.
Oliveira & Barros, S. Paulo.
Dr. Octavio Amaral, Paraná.
Pio de Souza Dias, Minas Geraes.
M. de Paula Leite de Barros, S. Paulo.
Pamplona & Cortes, Rio de Janeiro.
Pedro A. de Carvalho, S. Paulo.

Pedro Opperman, Rio Grande do Sul.
Rodolpho Altenburg, Santa Catharina.
Romano & Irmãos, S. Paulo.
Souza & Companhia, S. Paulo.
Senador Baptista de Mello, Minas Geraes.
Stumpe & Studer, Bahia.
Senna & Carvalho, Minas Geraes.
C. M. de Sertãosinho, S. Paulo.
C. A. Schrammel, Rio Grande do Sul.
D. Iria Alves Ferreira, S. Paulo.
Turibio Leite de Barros, S. Paulo.
Dr. Theophilo Maciel, S. Paulo.
Umberto Numbach, Rio Grande do Sul.
Urbano de Azevedo, S. Paulo.
Umbelino Gonçalves, Bahia.
Viuva Motta & Filho, S. Paulo.
Viuva Cerqueira Lima, Bahia.
Vicente Dias Junior, S. Paulo.
Vicente Nasti, S. Paulo.
Vasco Mendes Rio Grande do Sul.
A. F. Zacharias, S. Paulo.
Ferreira Junior & Saraiva, S. Paulo.
Joaquim Augusto R. do Valle, S. Paulo.

GROUP 85.

Animal Food Products.

GOLD MEDAL.

Bruno da Silva & Oliveira, Minas Geraes.
G. Einloft, Rio Grande do Sul.
A. Oderich & Co., Rio Grande do Sul.
Jacob Renner & Co., Rio Grande do Sul.
Governo do Estado, Amazonas.
Fabrica Carmo do Rio Claro, Minas Geraes.
Companhia de Lacticinios da Mantiqueira. Minas Geraes.
Fabrica do Pontalete, Minas Geraes.

SILVER MEDAL.

Luis Antunes & Co., Rio Grande do Sul.
A. Arnt & Co., Rio Grande do Sul.
Carlos da Silva Fortes, Minas Geraes.
Otero, Gomes & Co., Rio Grande do Sul.
Pedro Kohlrausch & Filho, Rio Grande do Sul.
Manuel Pinho & Filhos, Sta. Catharina.
Fabrica de Lacticinios da Traituba, Minas Geraes.
Mario Andrade & Co., Minas Geraes.
Azevedo & Co., Minas Geraes.
Fabrica Carmo do Rio Verde, Minas Geraes.

BRONZE MEDAL.

Antonio José Duque, Minas Geraes
Theodoro Marcos Ayrosa, S. Paulo.
Zeferino Machado, Rio Grande do Sul.
Nicola Greco & Co., Rio Grande do Sul.
Elijalde & Co., Rio Grande do Sul.
Eugenio Aubert, Amazonas.
Fabrica União da Banha, Rio Grande do Sul.
José Dias de Souza, Rio Grande do Sul.

GROUP 87.

Farinaceous Products and their Derivatives.

GRAND PRIZE.

Rio de Janeiro Flour Mills & Granaries. Ld., Rio de Janeiro.
Fratelli Secchi, S. Paulo.

GOLD MEDAL.

Natale Grimaldi, Rio Grande do Sul.
Moinho Matarazzo, S. Paulo.
Albino & Companhia, Rio Grande do Sul.
Secretaria da Agricultura, Bahia.
Governo do Estado, Amazonas.

SILVER MEDAL.

Intendencia de Manaos, Amazonas.
Carlos Giuntini, S. Paulo.
Argollo, Cardoso & Co., Bahia.
Luiz Antunes & Co., Rio Grande do Sul.
Sebastião Baptista & Irmão, Amazonas,
Commissão de Sto Antonio da Patrulha, Rio Grande do Sul.
Commissão de S. José dos Pinhaes, Paraná.
Commissão de Florianopolis, Santa Catharina.
Commissão de Guarakessaba, Paraná
Intendencia do Humaytá, Amazonas.
C. Municipal de Jequié, Bahia.
Commissão de Feira de Sant' Anna, Bahia.
Commissão do Rio Negro Paraná.
Commissão de Curitibanos, Santa Catharina.
Camara de Antonina, Paraná
Commissão de Antonina, Paraná.
Raphael Todeschini & Irmão, Paraná.
Paulo Simoni, Minas Geraes.
S. Baptista & Irmão, Amazonas.
Casa Vieira, Amazonas.
Commissão de Rio Grande, Rio Grande do Sul.

BRONZE MEDAL.

João Cunico & Irmão, Paraná.
Arthur Suplicy, Paraná.
Francisco de Assis, Maranhão.
Francisco Killian, Paraná.
Heraclito Nina, Maranhão.
Leonel Azevedo, Rio Grande do Sul.
Pedro Leite, Paraná.
Manoel de Macedo Netto, Paraná.
Guilherme F. Walter, Santa Catharina.
A. Pereira Tavares, Rio Grande do Sul.
F. de Assis e Silva, Maranhão.
Arsenio Gonçalves Cordeiro, Paraná.
Commissão do Estado, Amazonas.
Colonia Maria Luiza, Paraná.
Ladislao Correa, Paraná.
J. J. Xavier da Silva, Paraná.
João Ignacio Calais, Rio Grande do Sul.
João B. de Almeida Filho, Matto Grosso.
Chacara do Hervaçal, Paraná.
João Deckman, Rio Grande do Sul.

Rodolpho Altenburg & Co., Sta. Catharina.
P. Darrick, Paraná.
Manoel X. da Silva, Paraná.
Sebastião M. Schmidt, Rio Grande do Sul.
Aureliano de Andrade, Paraná.
Anacleto P. Bueno, Paraná.
Emilio Lempintz, Rio Grande do Sul.
João Radel, Rio Grande do Sul.
Carlos Berenstein, Rio Grande do Sul.
Giovanni Votta & Co., S. Paulo.
Samuel Aurvalle, Rio Grande do Sul.
João Moreira da Silva, Santa Catharina.
Manuel Adeodato de Albuquerque, Amazonas.

GROUP 88.

Bread and Pastry.

GRAND PRIZE.

Reichert Irmãos, S. Paulo.

GOLD MEDAL.

Luiz da Fonseca Oliveira, Pernambuco.
Leal Santos & Co., Rio Grande do Sul.
Neugebauer Irmãos, Rio Grande do Sul.
Castellões & Co., S. Paulo.

SILVER MEDAL.

Oscar Riffer & Co., Rio Grande do Sul.
Giovanni Votta & Co., S. Paulo.

BRONZE MEDAL.

D. B. Meirelles de Andrade, Amazonas.
Herdeiros de J. F. Perez, S. Paulo.
Carlos Giuntini, S. Paulo.

GROUP 89.

Preserved Meat, Fish, Vegetables and Fruits.

GOLD MEDAL.

Companhia Manufactora de Conservas Alimenticias, Rio de Janeiro.
Leal Santos & Co., Rio Grande do Sul.

SILVER MEDAL.

João Batalha, Pará.
Estabelecimento do Paredão, Rio Grande do Sul.
Governo do Estado, Amazonas.
Viuva Carlos Trein & Co., Rio Grande do Sul.
Bernardino Costa & Co, Pernambuco.
Guilherme Schramm & Filhos, Rio Grande do Sul.
Paul Fabre & Co., S. Paulo.
Padre João C. de Moura, Pernambuco.
Secretaria da Agricultura, Bahia.
Casa Vieira, Amazonas.

BRONZE MEDAL.

Manuel Adeodato de Albuquerque, Amazonas.
Bruno Baer, Paraná
Domingos C. Perdigão, Maranhão.
Sebastião Baptista & Irmão, Amazonas.
João Moreira da Silva Santa Catharina.

GROUP 90.

Sugar and Confectionery.

GRAND PRIZE.

Neugebauer Irmãos, Rio Grande do Sul.
Companhia Matte Larangeira, Matto Grosso.
David Carneiro & Companhia, Paraná.
Societè Anonyme des Sucreries Villa Raffard, S. Paulo.

GOLD MEDAL.

Governo do Estado, Amazonas.
F. Pinto Lima Guedes, Pará.
Leal, Santos & Co., Rio Grande do Sul.
Macedo & Filho, Paraná.
Companhia Industrial de Joinville, Santa Catharina.
Guimarães & Comp., Paraná.
Commissão do Estado, Paraná.
Victorino José Correia, Paraná.
Fabrica Yguassú, Paraná.
José R. de Macedo Junior, Paraná.
João Moreau, Rio Grande do Sul.
B. R. de Azevedo & Comp., Paraná.
Agostinho Ermelino de Leão Junior, Paraná.
Manhães & Irmãos, E. do Rio de Janeiro.
Governo do Estado, Alagoas.
D. Anna Navarro, S. Paulo.
C. Municipal de Parintins, Amazonas.
Sebastião Baptista & Irmão, Amazonas.
J. Berthold, Paraná.
Engenho Central Quissamã, E. do Rio de Janeiro.
Companhia Industrial Pernambucana, Pernambuco.
Companhia Geral de Melhoramentos de Pernambuco, Pernambuco.
Governo do Estado, Pernambuco.
Dr. Francisco da Rocha Lima, Bahia.
Sá, Ribeiro & Co., Bahia.
José Lourenço da Silva Oliveira, Pernambuco.
A. Marcolino de Magalhães & Co., Bahia.
A. da Costa Marques, Matto Grosso.
Falchi Giannini & Co., S. Paulo.
M. Gerin & Co., Rio de Janeiro.
Antonio Cruz & Co., Pernambuco.
Neugebauer Irmãos, Rio Grande do Sul.
Companhia Manufactora de Conservas Alimenticias, Rio de Janeiro.

SILVER MEDAL.

Domingos Valente de Aguiar, Bahia.
Evaristo Teixeira do Amaral, Rio Grande do Sul.
Antonio Paes de Barros, Matto Grosso.
Henrique Boening, Rio Grande do Sul.
Paulo Bottentuit, Maranhão.
F. Amaral Cardoso & Co., Pernambuco.
Martins de Carvalho & Co., Minas Geraes.
Gonçalves Cezar & Co., Bahia.
Fincato & Comp., S. Paulo.
Hugo Hennig Rio Grande do Sul.

Engenho Central S. João, Parahyba.
Kruel & Kruel, Rio Grande do Sul.
José Pereira Leite, Maranhão.
Dr. Camara Lima, Maranhão.
J. Lipiani & Co., Rio de Janeiro.
Frederico Momm, Santa Catharina.
Dr. Frederico Rodrigues de Moraes, Bahia.
Pedro Opperman, Rio Grande do Sul.
Frederico Ploetterle, S. Paulo.
Engenho Central Riachuelo, Sergipe.
Affonso Silva, Rio Grande do Sul.
José Ferreira do Amaral e Silva, Paraná.
Virgilio Xavier da Silva, Paraná.
Carlos Selbach Sobrinho, Rio Grande do Sul.
Augusto Octaviano de Souza, Pernambuco.
Barão de Assú da Torre, Bahia.
Viuva & Filhos de João da Cruz, Maranhão.

BRONZE MEDAL.

Antonio C. Melchert, S. Paulo.
Tertuliano & Filhos, Bahia.

GROUP 92.

Wines and Brandies.

GRAND PRIZE.

Arthur Nogueira & Co., S. Paulo.

GOLD MEDAL.

Genesio de Souza Pitanga, Bahia.
Societè Anonyme des Distilleries Breziliennes, S. Paulo.
Engenho Central Quissamã, E. do Rio de Janeiro
V. Coulon, S. Paulo.
Januario L. Carneiro, Minas Geraes.
Antonio Cruz & Co., Pernambuco.
Augusto Berger, Amazonas.

SILVER MEDAL.

J. Sant' Anna Andrade, Goyaz.
Freire de Aguiar, Rio de Janeiro.
Commissão de Antonina, Paraná.
H. Bier, Rio Grande do Sul.
José Bisol, Rio Grande do Sul.
Francisco Pinto Brandão, Capital Federal.
José Becker, Rio Grande do Sul.
J. Berthold, Paraná.
Antonio Cruz & Co., Pernambuco.
A. Castro, Minas Geraes.
Pascal Canzoneri, Rio Grande do Sul.
Felicissimo F. de Jesus, Rio Grande do Sul.
Commissão de Florianopolis, Santa Catharina.
Freitas & Seipel, Bahia.
Aurelio A. de Figueiredo, Minas Geraes.
Henrique Grassman, S. Paulo.
Aristides Germani, Rio Grande do Sul.
Hugo Hennig, Rio Grande do Sul.
Ignacio R. da Silva, Rio Grande do Sul.
Julian Sala, Santa Catharina.
João de Deus Luis da Silva, Rio Grande do Sul.
Tavares Lapa & Co., Pernambuco.
Vicente Romano Lobosco, Minas Geraes.
Dr. Camara Lima, Maranhão.
Diogo Martins Ribeiro, S. Paulo.
João A. F. Malaia, Rio de Janeiro.
Brazilino Moura, Paraná.
Medeiros & Co., Pernambuco.
Cristiá & Co, Rio Grande do Sul.
Pereira Pinto & Co., Pernambuco.
Industria Vinicola Pelotense, Rio Grande do Sul.
F. P. Parada, Maranhão.
José Polycarpo Paulino, Rio Grande do Sul.
Sucrerie de Porto Feliz, S. Paulo.
Germano Parolini, Rio Grande do Sul.
Antonio Polydoro, Pará.
Paulo Rossato & Irmão, Rio Grande do Sul.
Engenho Recurso, Maranhão.
Franco Ramos & Co., Rio Grande do Sul.
Jacob Selbach Junior, Rio Grande do Sul.
Silva & Companhia, Parahyba.
Henrique Thielen, Paraná.
J. P. Teixeira, Sergipe.
Usina do Itaicy, Matto Grosso.
Alberto Ferreira Vianna, E. do Rio de Janeiro.
João Galetto, Paraná.

BRONZE MEDAL.

M. Alves Porto, Rio Grande do Sul.
Alberto Azevedo, Sergipe.
Eugenio Aubert, Amazonas.
Candido de Almeida Botelho, Alagoas,
Col. João Alves de Castilho, Minas Geraes.
Amaral, Cardoso & Co., Pernambuco.
Amando Cunha, Paraná.
Angelo Chitolina, Rio Grande do Sul.
F. Amaral Cardoso & Co., Pernambuco.
P. Amaral Cardozo & Co., Pernambuco.
João C. Diehl, Rio Grande do Sul.
Guido Fraccarolli & Comp., Minas Geraes.
Cunha Guimarães & Cia., Rio Grande do Sul.
Antonio B. de Pinho Louzada, Rio Grande do Sul.
Dr. V. Labatut, Rio de Janeiro.
Lino Sartori & Irmão, Rio Grande do Sul.
Rodolpho Müller, Paraná.
F. Maineri & Irmão, Rio Grande do Sul.
Pedro Opperman, Rio Grande do Sul.
Chacara Poplada, Paraná.
João Ritter, Rio Grande do Sul.
Paulo Simoni, Minas Geraes.
Floriano Serpa, Bahia.

Julian Sala, Sta. Catharina.
Possidonio José Torres, Rio Grande do Sul.
Antonio Trevizan, São Paulo.
Emmanuel Voluz, Paraná.
Padre Manoel Mendes P. de Vasconcellos, Minas Geraes.

GROUP 93.

Syrups and Liqueurs—Distilled Spirits—Commercial Alcohol.

GRAND PRIZE.

Freire de Aguiar, Rio de Janeiro.
Comp.-Geral de Melhoramentos, Pernambuco.
Dr. Luiz Pereira Barreto, S. Paulo.
Artigas & Comp., S. Paulo.

GOLD MEDAL.

Ch. Berthaud, Minas Geraes.
Antonio Cruz, Pernambuco.
A. S. & Co., Pará.
Distillação Kroeff, Rio Grande do Sul.
Maurice Gerin, Rio de Janeiro.
L. Travaglio, S. Paulo.
Distillação Riograndense, Rio Grande do Sul.
Vicente Romano Lobosco, Minas Geraes.
Antonio Trevizan, São Paulo.

SILVER MEDAL.

Tavares, Lapa & Co, Pernambuco.
Guido Fraccarolli & Co., Minas Geraes.
Eugenio Aubert, Amazonas.
Cristiá & Co., Rio Grande do Sul.
Antonio Bove, S. Paulo.
V. Coulon, S. Paulo.
Francisco Clerici & Co., S. Paulo.
Hugo Hennig, Rio Grande do Sul.
Jacob Selbach Jr., Rio Grande do Sul.
João Silva, Rio Grande do Sul.
Aleixo Varoli & Pedretti, S. Paulo.
João Alves do Valle, Maranhão.
Frederico Momm, Sta. Catharina.
Januario Laurindo Carneiro, Minas Geraes.
Macario Lessa, Pernambuco.
Brinatti, Fincato & Co., S. Paulo.
Equi & Company, Minas Geraes.

BRONZE MEDAL.

Candido de Almeida Botelho, Alagoas.
Paulo Simoni, Minas Geraes.
Arthur de Sá, Paraná.
De Lavigne & Cia., Paraná.
Usina do Itaicy, Matto Grosso.
H. José Netto Carneiro, Goyaz.

GROUP 94.

Fermented Beverages.

GRAND PRIZE.

Companhia Antarctica Paulista, S. Paulo.

GOLD MEDAL.

Georg Maschke & Co., Rio de Janeiro.

SILVER MEDAL.

Preiss, Haussler & Co., Rio de Janeiro.
Henrique Stupakoff & Co., S. Paulo.
C. Ritter & Irmão, Rio Grande do Sul.
Viveiros & Co., Rio de Janeiro.

BRONZE MEDAL.

E. Bengtsson & Co., Paraná.
Carlos Bopp, Rio Grande do Sul.
Carlos Stiebler, Minas Geraes.
José Weiss, Minas Geraes.

GROUP 95.

Inedible Agricultural Products.

GOLD MEDAL.

Commissão do Estado, Piauhy.
Boxwell Nephew & Co., Pernambuco.
Governo do Estado, Amazonas.
Argollo, Cardozo & Co., Bahia.
C. M. de Feira de Sant' Anna, Bahia.
Serra & Co., Rio Grande do Sul.
Commissão do Estado, Amazonas.

SILVER MEDAL.

Rob Schieffler, Sta. Catharina.
Neves, Oliveira & Co., Maranhão.
Commissão do Estado, Alagoas.
J. Eugenio & Co., Paraná.
Campos Vianna & Co., E. do Rio de Janeiro.
C. M. de Sertãozinho, S. Paulo.

BRONZE MEDAL.

C. M. de Sto. Antonio, Rio Grande do Sul.

GROUP 96.

Useful Insects and their Products.

GRAND PRIZE.

Asdrubal do Nascimento, S. Paulo.

GOLD MEDAL.

Pedro A. Borges, S. Paulo.
S. A. Bataillard, S. Paulo.
Companhia Mechanica e Importadora, S. Paulo.
Luiz Baldezarini, Rio Grande do Sul.
Padre Domingos Zatti, Minas Geraes.
Governo do Estado, Amazonas.
Alberto de Almeida, Amazonas.
Commissão do Estado, Santa Catharina.
Salomon Bufarah, S. Paulo.
H. von Schlabrendofl, Rio Grande do Sul.

SILVER MEDAL.

Escola Dom Bosco, Minas Geraes.
Henrique Huber, Rio Grande do Sul.
José Rosenstengel, Rio Grande do Sul.
Pedro Huber Senior, Rio Grande do Sul.
Camara Municipal de Sertãosinho, S. Paulo.
Governo do Estado, Paraná.
Congregação das Filhas da Immaculada Conceição, Santa Catharina.
Rodolpho de Miranda, São Paulo
M. J. Marinho, Rio Grande do Sul.
Giulio Mangoni, Rio Grande do Sul.
Casemiro Jorge, Minas Geraes.
Frederico Morandi, Rio Grande do Sul.
Luiz Mandelli, Rio Grande do Sul.

GROUP 112.

Appliances and Processes Used in Forestry.

GOLD MEDAL.

Dr. Barbosa Rodrigues, Rio de Janeiro.

SILVER MEDAL.

Dr. W. Schwacke, Minas Geraes.

BRONZE MEDAL.

Dr. João Dutra, Rio Grande do Sul

GROUP 113.

Products of the Cultivation of Forests and of Forest Industries.

GRAND PRIZE.

Governo do Brazil, Brazil.

GOLD MEDAL.

Silva, Telles & Co., S. Palo.
Collaborators:
Commissão do Estado de Amazonas.
Commissão do Estado de Bahia.
Commissão do Estado de Matto Grosso.
Commissão do Estado de Minas Geraes.
Commissão do Estado de Pará.
Commissão do Estado de Paraná.
Commissão do Estado de Sta. Catharina.
Commissão do Estado de Sergipe.
Commissão do Estado de S. Paulo.
Commissão do Estado de Rio Grande do Sul.

SILVER MEDAL.

Arsenal de Marinha do Ladario, Matto Grosso.
Intendencia de Manaos, Amazonas.
Stengel & Co., Paraná.
Carlos Schumann, Paraná.
Germano Steigleder Sobrinho, Rio Grande do Sul.
Intendencia de Coary, Amazonas.
Intendencia de Parintins, Amazonas.
Intendencia de Floriano Peixoto, Amazonas.
Intendencia de Barcellos, Amazonas.
Intendencia de Barreirinhas, Amazonas.
Intendencia de Borba, Amazonas.
Intendencia de São Paulo d' Olivença, Amazonas.
Intendencia de Canutama, Amazonas.
Intendencia de Codajás, Amazonas.
Intendencia de Fonte Boa, Amazonas.
Intendencia de Maués, Amazonas.
Intendencia de Humaytá, Amazonas.
Intendencia de Itacoatiara, .Amazonas.
Intendencia de Manicoré, Amazonas.
Intendencia de Labréa, Amazonas.
Intendencia de Moura, Amazonas.
Intendencia de S. Gabriel, Amazonas.
Intendencia de Manacapurú, Amazonas.
Intendencia de Santo Antonio, Amazonas.
Intendencia de S. Felippe, Amazonas.
Intendencia de Silves, Amazonas.
Intendencia de Teffe, Amazonas.
Intendencia de Urucará, Amazonas.
Intendencia de Boa Vista Amazonas.
Intendencia de Silverio Nery, Amazonas.
Intendencia de Uricurituba, Amazonas.
Camara Municipal de Antonina, Paraná.
Camara Municipal de Curityba, Paraná.
Commissão da Fóz do Iguassú, Paraná.
Commissão de Ponta Grossa, Paraná.
Commissão de Lapa, Paraná.
Commissão de Campo Largo, Paraná.
Camara Municipal de Paranaguá, Paraná.
Camara Municipal de Morretes, Paraná.
Camara Municipal de S. José dos Pinhaes, Paraná.
Commissão de Ypiranga, Paraná.
Camara Municipal de Alcobaça, Bahia.
Camara Municipal de Feira de Sant' Anna Bahia.
Camara Municipal de Jequié, Bahia.
Commissão Municipal de Blumenau, Sta. Catharina.
Commissão Municipal de Campos Novos Sta. Catharina
Commissão Central de Florianopolis, Sta. Catharina.
Commissão Municipal de Jaguarúna, Sta. Catharina.
Commissão Municipal de Brejaúva, Sta. Catharina.
Commissão Municipal de Campo Alegre, Sta. Catharina.
Commissão Municipal de Jaguarussú, Sta. Catharina.
Commissão Municipal de S. Bento, Sta. Catharina.
Commissão Municipal de Curytibanos, Sta. Catharina.
Commissão Municipal de S. Francisco, Sta. Catharina.
Commissão Municipal de Campo Alegre, Espirito Santo.
Camara Municipal de Boa Esperança, São Paulo.

Camara Municipal de Descalvado, São Paulo.
Camara Municipal de Sertãozinho, São Paulo.
Camara Municipal de S. Simão, São Paulo.
Quarto Districto Agronomico de S. Paulo. São Paulo.
Sociedade Paulista de Agricultura, São Paulo.
Commissão de Barras, Piauhy.
Commissão de Campo Maior, Piauhy.
Commissão de Floriano, Piauhy.
Commissão de Peripery, Piauhy.
Commissão de Piracuruca, Piauhy.
Commissão de Picos, Piauhy.
Commissão de Theresina, Piauhy.
Commissão de União, Piauhy.
Camara Municipal de Mamanguape, Parahyba.
Camara Municipal de Itajahy, Sta. Catharina.
Camara Municipal de Simão Dias, Sergipe.
Camara Municipal de S. Luiz Gonzaga, Rio Grande do Sul.
Camara Municipal de S. Leopoldo, Rio Grande do Sul.
Intendencia de Porto Alegre, Rio Grande do Sul.
Arsenal de Marinha, Pará.
Escola de Minas de Ouro Preto, Minas Geraes.
Marcenaria Moderna, Amazonas.
Secretaria da Agricultura, Bahia.

BRONZE MEDAL.

Aguiar & Co., Amazonas.
Graciano Azambuja, Rio Grande do Sul.
J. Montaury, Rio Grande do Sul.
Huascar de Souza Pereira, São Paulo.
Dr. Arthur Peixoto, Alagôas.
Dr. Antonio Olyntho, Minas Geraes.
Marcenaria Modelo, Amazonas.

GROUP 114.

Appliances for Gathering Wild Crops and Products Obtained.

GRAND PRIZE.

Governo do Estado, Amazonas.

GOLD MEDAL.

J. M. Torres de Freitas, Amazonas.
Intendencia de Anayáz, Amazonas.
Intendencia de S. Felippe, Amazonas.
Intendencia de Labréa, Amazonas.
Intendencia de Codajáz, Amazonas.
Intendencia de Berury, Amazonas.
C. C. Fernandes de Sá, Amazonas.
Intendencia de S. Paulo de Olivença, Amazonas.

SILVER MEDAL.

Guimarães & Co., Paraná.
C. Municipal de Ilhéos, Bahia.
Intendencia de Humaytá, Amazonas.
Intendencia de Itacoatiára, Amazonas.
Commissão do Estado, Paraná.
C. M. de Cannavieiras, Bahia.
Intendencia de Maués, Amazonas.
Col. J. C. Brazil Montenegro, Pará.
Agostinho E. de Leão Junior, Paraná.
Comp. Matte Larangeira, Matto Grosso.
Intendencia de Manicoré Amazonas.
Governo do Estado, Rio Grande do Sul.
Intendencia de Anaman, Amazonas.
C. Municipal de Jequié, Bahia.
C. M. de S. Leopoldo, Rio Grande do Sul.
Commissão do Estado, Pará.
Intendencia de Rio Branco, Amazonas.
Intendencia de Silves Amazonas.
Umbelino Gonçalves, Bahia.
C. M. de Porto Seguro, Bahia.
C. M. de Boa Esperança, S. Paulo.
Commissão de Fonte Boa, Amazonas.
C. Municipal de Feira de Sant' Anna, Bahia.

BRONZE MEDAL.

Alvaro Vianna, Matto Grosso.
Commissão de S. Bento, Sta. Catharina.
Intendencia de S. Gabriel, Amazonas.
Pereira, Mawson & Co., Bahia.
Romulo M. Pacheco, Parahyba.
Sociedade Paulista de Agricultura Commercio e Industria S. Paulo.
C. M. de Porto Alegre, Rio Grande do Sul.
Intendencia de Manaos, Amazonas.
Dr. Luiz de Oliveira, Parahyba.
C. M. Calmon, Bahia.
Jorge Bodstein, Motto Grosso.
Nilo Baptista, Amazonas.
Boris Freres, Ceará.
Nilo P. Jardim, Amazonas.
T. Levy, Camille & Co., Amazonas.
Secretaria da Agricultura Bahia.
João B. de Almeida, Matto Grosso.
Antonio Campos, Maranhão.
C. M. de S. Luiz Gonzaga, Rio Grande do Sul.
Rotulo, Limited, Minas Geraes.
Rossbach Bros., Bahia.
Diogo M. Ribeiro, São Paulo.
Virgilio Xavier da Silva, Paraná.
F. Rangel Torres, Parahyba.
Commissão do Estado, Matto Grosso.
Dr. A. de Figueiredo, Amazonas.
Dr. M. D. Correia de Góes Parahyba.
C. M. de S. Simão, S. Paulo.
H. José Vieira Filho, Matto Grosso.
Orlando & Irmãos, Matto Grosso.
Argollo, Cardoso & Co., Bahia.

DEPARTMENT OF MINES AND METALLURGY

GROUP 116.

Working of Mines, Ore Beds and Stone Quarries.

GRAND PRIZE.

Secretaria da Industria e Viação, Rio de Janeiro.

Collaborator:
Antonio Olyntho, Minas Geraes.

GOLD MEDALS.

Commissão Geral do Estado de Minas Geraes, Minas Geraes.
Collaborators:
Escola de Minas de Ouro Preto, Minas Geraes.
Commissão de Minas do Estado, Minas Geraes.
Raul Vieira, Minas Geraes.
Felisberto Brant, Minas Geraes.
Escola de Minas, Minas Geraes.
Rotulo Limited, Minas Geraes.
Usina Wigg, Minas Geraes.
Companhia Morro da Mina, Minas Geraes.
Commissão do Estado, Rio Grande do Sul.
Sociedade Bom Retiro, Rio Grande do Sul.
Brazilian Diamond Fields Corporation Limited, Bahia.
Usina Esperança, Minas Geraes.
Fabrica de Ferro Ypanema, S. Paulo.
St. John d'El Rey Gold Mines of Brazil, Limited, Minas Geraes.
The Ouro Preto Gold Mines of Brazil, Limited, Minas Geraes.
Transpacific Mining Co., Matto Grosso.
Luiz de Rezende, Rio de Janeiro.
The Vista Alegre Gold Mining Co., Limited, Rio Grande do Sul.
Societè des Mines de Cuivre de Camaquam, Rio Grande do Sul.
Secretaria da Industria e Viação, Rio de Janeiro.
Companhia Extractiva Mineral do Brazil, Bahia.
Governo Federal, Rio de Janeiro.
Companhia de Manganez Queluz de Minas, Minas Geraes.

SILVER MEDAL.

Secretaria da Agricultura, Bahia.
Banco União, S. Paulo.
Commissão Municipal de Lorena, S. Paulo.
Empreza de Aguas de Caxambú, Minas Geraes.
Major Arthur Felicissimo, Minas Geraes.
Palhares Grühn & Co., E. do Rio de Janeiro.
Secretaria da Fazenda, Rio de Janeiro.
Dr. Alvaro A. da Silveira, Minas Geraes.
João Ribeiro de Macedo, Paraná.
Empreza Lambary & Cambuquira, Minas Geraes.
Argollo, Cardoso & Co., Bahia.
J. Baptista Borges Nogueira, Minas Geraes.
Dr. Erico Coelho, Rio de Janeiro.
Commissão do Estado, Goyaz.
Dr. Eugenio Dahne, Rio Grande do Sul.
Intendencia de Porto Alegre, Rio Grande do Sul.
Estrada de Ferro Central do Brazil, Rio de Janeiro.
Jeronymo Teixeira França, Rio Grande do Sul.
Governo do Estado, Matto Grosso.
Intendencia de Macáu Rio Grande do Norte.
Francisco A. Ribeiro, Matto Grosso.
Gonçalves Ramos & Cia., Minas Geraes.
Dr. José Goncalves Chaves, Rio Grande do Sul.
Archer Luce & Co., Rio Grande do Sul.
Dr. Alberto Vande Capelle, Rio Grande do Sul.
Societè Belgo Bresilienne, Rio Grande do Sul.
Societè des Mines d'Or du Serrito, Rio Grande do Sul.
Intendencia de Porto Alegre, Rio Grande do Sul.
Augusto Rosat, Rio Grande do Sul.
Eduardo Secco, Rio Grande do Sul.
Samuel de Souza, Rio Grande do Sul.
Intendancia de Uruguayana, Rio Grande do Sul.
Intendencia de Caçapava, Rio Grande do Sul.
Edmund Dreher, Rio Grande do Sul.
Francisco de Paula Guedes, Rio Grande do Sul.
Pedro Alves Porto, Rio Grande do Sul.
Companhia Belga de Tripuhy, Minas, Geraes.
João Brant, Minas Geraes.
Major F. Brant, Minas Geraes.
Intendencia de São Gabriel, Rio Grande do Sul.
Companhia Aurifera, Minas Geraes.
Companhia Gandarella, Minas Geraes.
C. J. Richardson, Minas Geraes.
Raul Vieira, Minas Geraes.
Totila Unzer, Minas Geraes.
Jõhn Gordon, Bahia.

BRONZE MEDAL.

H. José Vieira Filho, Matto Grosso.
Pedro de B. Severo, Rio Grande do Sul.
Rowe & Mosselmann, Bahia.
José Victorino da Rocha, Rio Grande do Sul,
Francisco Soucasaux, Minas Geraes.
Dr. J. C. da Costa Senna, Minas Geraes.
Dr. Josá Gonçalves da Silva, Bahia.
Intendencia de S. João de Montenegro, Rio Grande do Sul.
Dr. A. M. Peixoto, de Souza, E. do Rio de Janeiro.
Commissão Municipal de Tibagy, Paraná.
Dr. M. F. de Almeida Sampaio, Bahia.
Commissão do Estado, Piauhy.
Commissão Municipal de Cuité, Parahyba.
Major R. de Paula Dias, Minas Geraes.
Col. Symphronio Campos, Minas Geraes.
Pantaleão Marques d'Avila, Rio Grande do Sul.
Luiz Caetano Ferraz, Minas Geraes.
Major Antonio Faria, Minas Geraes.
Dr. Manoel A. Furtado, S. Paulo.
Dr. Almeida Gomes, Minas Geraes.
Col. Joaquim Pereira de Macedo, Paraná.
Col. Antonio Vaz de Oliveira, Rio Grande do Sul.
Dr. Joaquim F. de Paula, Minas Geraes.
Dr. Alfredo da Silveira, Rio Grande do Sul.
Commissão M. de Antonina, Paraná.
Servulo de Almeida, Rio Grande do Sul.
Graciano A. de Azambuja, Rio Grande do Sul.
Commissão M. de Aracajú, Sergipe.
Dr. A. A. de Figueiredo Carvalho, Parahyba.
A. F. Castello Branco, Minas Geraes.
Fortunato P. Campos, Minas Geraes.
Col. Antonio Castro, Minas Geraes.
Commissão do Estado, Minas Geraes.
Cezar Carcano, Matto Grosso.
Intendencia de Caxias, Rio Grande do Sul.
José Vicente da Costa, Minas Geraes.
Col. J. G. de Almeida Cotta, Minas Geraes.
Commissão de Curytiba, Paraná.

GROUP 117.

Mine Models, Maps, Photographs.

GOLD MEDAL.

St. John d'El Rey Gold Mining Co., Minas Geraes.
Dr. Eugenio Dahne, Rio Grande do Sul.

BRONZE MEDAL.

Companhia Rotulo, Limited, Minas Geraes.
The Trans-Pacific Mining and Exploration Co., Matto Grosso.

GROUP 118.

Metallurgy.

GOLD MEDAL.

Fabrica de Ferro Ypanema, S. Paulo.
Usina Esperança, Minas Geraes.

SILVER MEDAL.

Affonso Bretas, Minas Geraes.
José Becker & Irmão, Rio Grande do Sul.
Societe des Mines de Cuivre de Camaquam, Rio Grande do Sul.
Müller & Filho, Paraná.

GROUP 119.

Literature of Mining, Metallurgy, Etc.

GOLD MEDAL.

José Carlos de Carvalho, Rio de Janeiro.

SILVER MEDAL.

Alcides Medrado, Minas Geraes.
Escola de Minas de Ouro Preto, Minas Geraes.

BRONZE MEDAL.

Luiz Ferraz, Minas Geraes.

DEPARTMENT OF FISH AND GAME

GROUP 121.

Products of Hunting.

GOLD MEDAL.

Governo do Brazil, Rio de Janeiro.
Mme. Alice Jacobsen, Rio de Janeiro.

SILVER MEDAL.

Carlos Ritter, Rio Grande do Sul.

GROUP 122.

Fishing Equipment and Products.

SILVER MEDAL.

Governo do Estado de Amazonas, Amazonas.

VIEWS OF RIO DE JANEIRO.

—Gloria Square. 2—Duke of Caixias Statue. 3—Monument of Discovery of Brazil.
4—D. Pedro I Statue.

DEPARTMENT OF ANTHROPOLOGY

GROUP 127.
Ethnology.

GRAND PRIZE.

Governo do Estado, Amazonas.

GOLD MEDAL.

Commissão Brazileira, Rio de Janiero.

SILVER MEDAL.

Ricardo Krone, S. Paulo.
Dr. Miranda Ribeiro, Rio de Janeiro.

BRONZE MEDAL.

Alphonse Roche, Matto Grosso.
Padre Nicolao Badariotti, Minas Geraes.

DEPARTMENT OF SOCIAL ECONOMY

GROUP 129.

Study and Investigation of Social and Economic Conditions.

GRAND PRIZE.

Sociedade Paulista de Agricultura Com. e Industria, S. Paulo.

GOLD MEDAL.

Secretaria da Industria e Viação, Rio de Janeiro.
Secretaria do Interior, S. Paulo.

SILVER MEDAL.

Associação Commercial de Santos, S. Paulo.
Medeiros & Co, S. Paulo.
Dr. F. Ramos, S. Paulo.
Governo do Estado, Matto Grosso.
Governo do Estado, Rio Grande do Sul.

BRONZE MEDAL.

Intendencia de Porto Alegre, Rio Grande do Sul.

GROUP 139.

Charities and Corrections.

GRAND PRIZE.

Secretaria do Interior, Rio de Janeiro.

GROUP 140.

Public Health.

GOLD MEDAL.

Instituto Vaccinogenico, S. Paulo.
Desinfectorio Central de Campinas, S. Paulo.

SILVER MEDAL.

Hospital de Isolamento da Capital, S. Paulo.
Instituto Serumtherapico de Butantan, S. Paulo.

BRONZE MEDAL.

Inspectoria de Hygiene, Bahia.

GROUP 141.

Municipal Improvement.

BRONZE MEDAL.

Prefeitura de Bello Horizonte, Minas Geraes.

DEPARTMENT OF PHYSICAL CULTURE

GROUP 143.

Games for Children and Adults.

GOLD MEDAL.

Governo do Estado,
Sporting Clubs of State.
Rio Grande do Sul.